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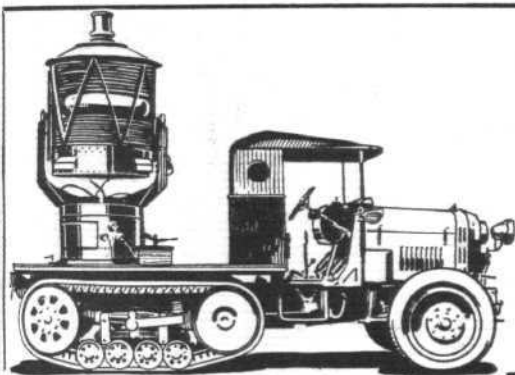
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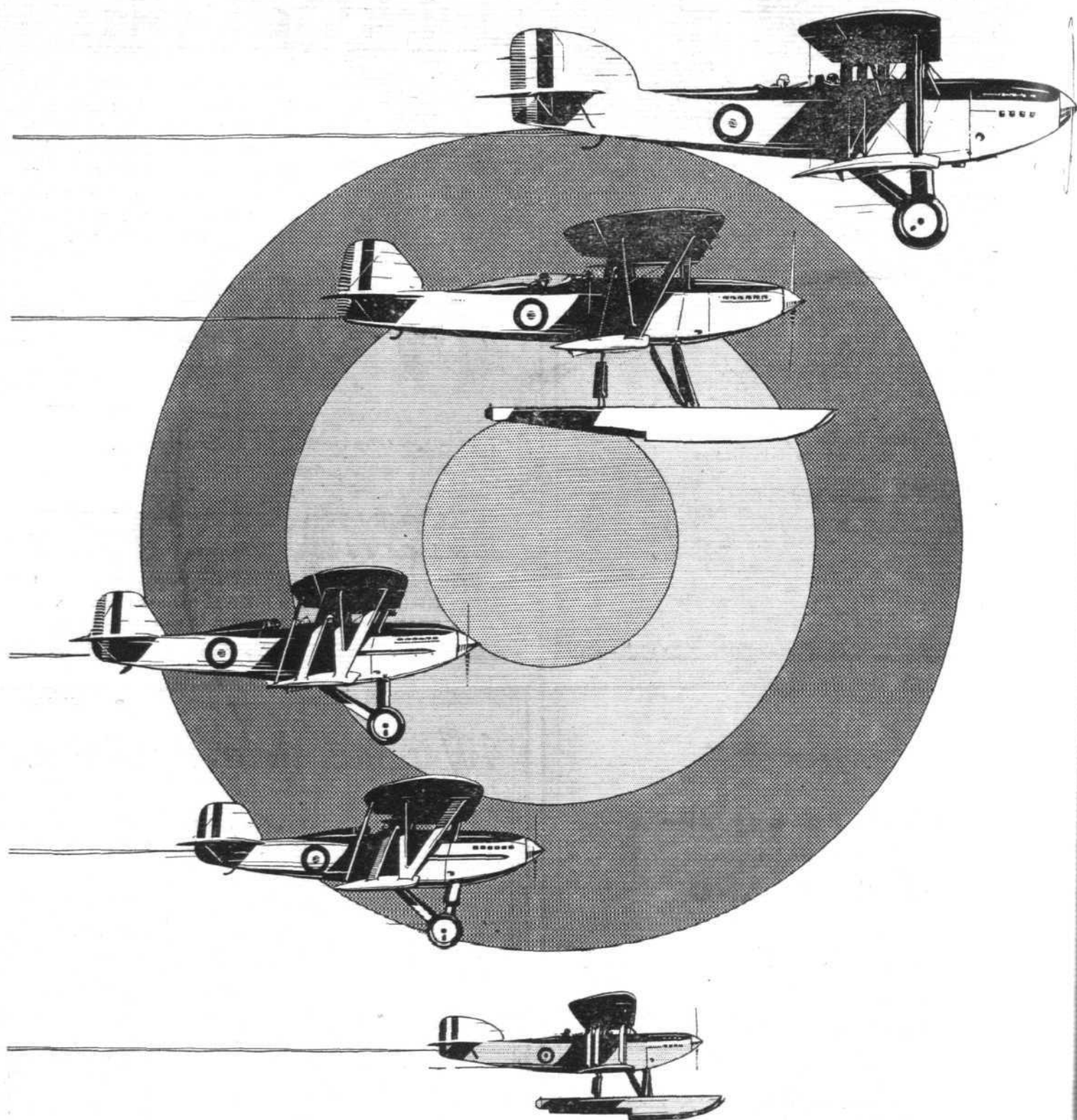
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## EDITORIAL COMMENT



PROMINENT official of the Air Ministry, who is closely concerned in the technical side of this year's Schneider Trophy defenders, remarked to us some months ago, while discussing with us the chances in this year's contest, that he would be quite satisfied if the High-Speed Flight could get delivery of the racing machines a fortnight before the date of the race. As the first of the Supermarine-Rolls Royce mono-planes was delivered last week, and had actually been flown by the end of the week, it may be assumed that for once we are ready in good time. It has always been a matter for jest that in any big aviation event most of the British machines have been "finished on the starting line." It is just as well that this is not the case this year. A Schneider Trophy defender is not exactly a type which can be treated lightly, and the fact that at any rate the first of the machines was already flying a month before the date of the race is an indication that our preparations are well advanced. The first of the Gloster-Napier mono-planes is expected to be ready for flying by the end of this week, so that there should be ample time for the pilots of the Schneider team to put in sufficient practice on the actual machines before the race, in addition to the extensive training on the 1927 machines which has been going on and will continue to do so at every favourable opportunity. Thus in the matter of preparedness of personnel, Britain's position may be said to be satisfactory. That the pilots chosen for the High-Speed Flight are the best possible no one will doubt who has had the privilege of seeing them at work. Their handling of the 1927 machines, now used for training and practice purposes, is superb, and we imagine that it is not going to be an easy matter to choose from among the team the three pilots to fly in the actual race.

On the technical side also there is very good cause for satisfaction. No figures are available (for obvious reasons) concerning either the power developed by the new engines or the speeds which the new machines are estimated to attain, but we do not believe we are very far from the mark if we

## DIARY OF CURRENT AND FORTHCOMING EVENTS

Club Secretaries and others desirous of announcing the dates of important fixtures are invited to send particulars for inclusion in this list—

- 1929.
- Aug. 15 .... International Balloon Race, Poland.
- Aug. 31-Sept. 1 .... International Air Rally, Hadleigh, Suffolk.
- Sept. 6-7 .... Schneider Trophy Race, Solent.
- Sept. 10-20 .... Aero Club de France Meeting, Le Baule.
- Sept. 22 .... Bristol Aeroplane Club's Aerial At Home.
- Oct. 1 .... Gordon-Bennett Balloon Race, St. Louis, U.S.A.
- Oct. 5 .... Newcastle Air Pageant, Cramlington Aerodrome.
- Oct. 31 .... Guggenheim Safe-Aircraft Competition Closes.

assume that the engines develop more than twice the power of the 1927 engines. It is not, of course, to be expected that this increase in power has been achieved without an attendant increase in weight, and the Supermarine-Rolls Royce S.6 looks a little larger than the S.5 of 1927. Probably one may assume, with a fair chance of being reasonably correct, that the engines develop rather more than twice the power, and that the machines are a little less than twice the weight of the 1927 types. If that assumption is correct, the power/weight ratio should be better this year than ever before while, and even more important in a racer which does not have to excel in climbing, the drag obviously has not been doubled, or anything approaching this figure. Altogether, therefore, it is reasonable to assume that speeds of a very high order will be attained by the British defenders this year.

That there are problems other than those connected with sheer performance it would be futile to deny. The action of the air controls, and the lightness or otherwise of the loads on the control stick and rudder bar are important features. The effect of torque-reaction, a very large one in small machines with engines of such large horse-powers, is ever a problem, and usually a racing machine is found, after preliminary test flights, to require a slight re-rigging of the wings to balance this. It speaks well for the skill of the designers of the Supermarine-Rolls Royce S.6 that the first flights indicated that but very little re-rigging was necessary. In this connection, lest readers should form an exaggerated idea of what such re-rigging involves, it should be pointed out that it is a question of fractions of a degree only, so that when it is stated that slight adjustments of any racing machine had to be made, it is safe to assume that they were very small in magnitude, although important in effect. Briefly it comes to this that unless a Schneider machine is, from the first, as near "right" as no matter, it is useless. There is no room for compromises and "wangling." We believe that the average person has no conception of the exacting design work which the production of such a machine demands. The fact that the Supermarine-Rolls Royce S.6 was flown at least twice *exactly as it left the works* is proof that there was very little more the designer could do to improve it from the point of view of handling in the air and on the water. We have no doubt that, with the long experience of racing aircraft which the Gloster firm has, the Gloster-Napier monoplane will be equally excellent when it arrives at Calshot during the latter part of this week.

Concerning the foreign challengers but little is known. It is unlikely that the French machines will take part in the race, and as but one machine has been entered by the United States of America, the race may well be found to be confined to Great Britain and Italy, as quite a minor mishap might put the U.S. machine out of the running. This is very much to be regretted, and British aviation circles will be unanimous in wishing the sole American challenger every possible luck, so that our cousins from the other side may be represented in the race.

The Italian challengers will undoubtedly be

formidable opponents. Details of their machines are not available, but it is known that at least one machine, a Savoia, is a twin-engined type, with the engines arranged in tandem in the manner suggested by the designers of the Dornier racing machine, a small-scale model of which was exhibited at Olympia recently. In two articles on the subject of racing seaplanes, published in our monthly technical supplement, *THE AIRCRAFT ENGINEER*, this year, Mr. Carter estimated that although the tandem-engined arrangement was less efficient than the single-engined, the extra power thus made available should result in a material increase in the speed attainable. If, as seems likely, the tandem-engined Italian challenger is of more than 2,000 h.p., and is found to possess the requisite controllability, it will prove a serious opponent to the British defenders, but there are many problems in such an arrangement which do not arise in the single-engined type, and it may well be that these problems may be such as to prevent full advantage being taken of the extra power which the use of engines in tandem should give. Taking it all around, we are very optimistic of a British success in September next.

❖   ❖   ❖

Her Grace the Duchess of Bedford has earned the gratitude of British aviation by the wonderful flight to India and back in a week which she and Capt. C. D. Barnard made recently in a Fokker monoplane fitted with a Bristol "Jupiter" engine.

A  
Very Fine  
Demonstration

The flight was much more than a fine sporting demonstration. It provided proof that by taking the shortest route to Karachi, India may be brought within some four days of London. Political difficulties have caused the longer route via Italy and Egypt to be used by the Imperial Airways air mail service, and this has been operated for some months with excellent regularity in seven days. There is little doubt that, if required, this time could be shortened somewhat, even using the present route. But there is no gainsaying the fact that the route followed by the Duchess of Bedford is the shorter of the two, and the time may come when it is possible for us to arrange for this to be followed as an alternative to the southern route.

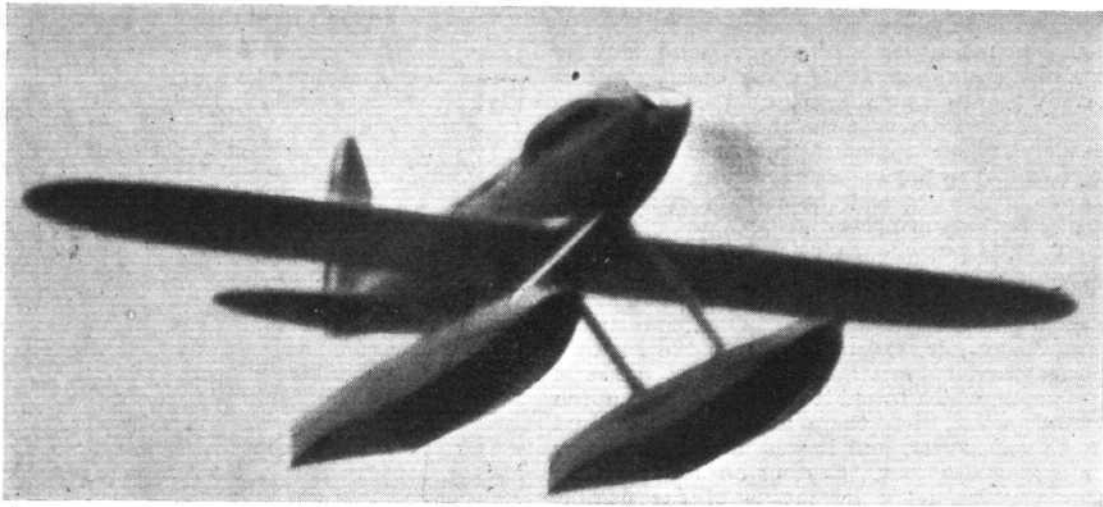
Technically the flight is of significance because of the long stages flown and the maintenance of a good average speed both on the outward and homeward journey. The "Jupiter" engine ran without a hitch, and apparently did not complain of having to cover nearly 10,000 miles in a week. So many attempts have just failed, through no fault of the engine, that it is exceedingly gratifying to see the "Jupiter" doing its share nobly when given a fair chance. From a British point of view it would have been preferable for an English machine to have been used, but none was available at the moment. This was mentioned by Capt. Barnard, although it is to be feared that his words were interpreted to mean that no British machine exists which could have done the flight. This is hardly the case, but circumstances and conditions other than technical resulted in the Fokker being chosen, and it would be churlish on our part to deny the machine the praise for the performance which is its due.

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S.6 in Flight.

("FLIGHT" Photo)

## THE BRITISH SCHNEIDER TROPHY DEFENDERS

### First Machine Flight Tested

NEVER in the history of British flying has a "press visit" been more thoroughly successful than was that arranged on Monday of this week, when the Supermarine Aviation Works, Ltd., the Gloster Aircraft Co., Ltd., D. Napier & Son, Ltd., and Rolls-Royce, Ltd., had invited representatives of the Press to visit Calshot Air Station, where the British High-speed Flight is now stationed, for the purpose of inspecting the new racing machines built for this year's contest for the Schneider Seaplane Trophy. Not only was the weather perfect, and the British team in fine fettle, but the first of the British racers to be finished and tested, the new Supermarine S.6 with Rolls-Royce "R" engine, was actually launched and flown most successfully by the Captain of the British team, Squadron-Leader A. H. Orlebar, A.F.C. The only "fly in the ointment" was the non-arrival of the first of the Gloster VI racers with Napier "Lion" VII D racing engine. It had been hoped that

this machine would also be on view, but a slight delay occurred, and representatives of the Press will not be able to inspect the machine until to-morrow, Friday. We hope to publish illustrations and a description of it in next week's issue.

The party travelled down to Southampton by train, and was there met by a number of motor coaches which conveyed the visitors to Calshot by the rather roundabout way necessitated by the situation of Calshot in relation to Southampton. Almost as soon as the visitors had arrived, the Supermarine S.5, with Napier racing engine, was launched, with Flying-Officer H. R. D. Waghorn, at the controls. This machine, it will be recalled, is the type on which, in 1927, Flight-Lieut. S. N. Webster won the Schneider Trophy contest at Venice, at an average speed of 281.656 m.p.h., and on which, in October last year, Flight-Lieut. D'Arcy Greig established a British record over the straight-line course with an average speed of 319.57 m.p.h., actually beating the Italian world's record of 318.62 m.p.h., established by Maj. Bernardi on a Macchi, but not by a sufficiently large margin to rank as a world's record.

Waghorn taxied across towards the Hamble side of Southampton Water in practically a flat calm, and, turning the S.5 in a south-westerly direction, opened out his engine. The little machine gathered speed relatively slowly, and, as was to be expected, in the absence of wind, took rather a long run to get off. Once on its steps, however, the S.5 got away very cleanly, and, with its "tail well up" streaked across towards the Isle of Wight. Making a wide circle, the S.5 was soon headed towards Calshot, and coming in quite low over the sheds, with the engine, and more particularly the propeller, screaming the rather distressing note which one has come to associate with these racing craft, it sped over our heads at a terrific pace. Time after time, Flying Officer Waghorn came around the base, just above the sheds, and no one could have asked for a finer demonstration of speed. In a race, especially of the character of the Schneider Contest, the spectator will not, unless he is exceptionally lucky in choosing his stand, obtain nearly such a close-up view of the machines, and Waghorn was obviously so much master of his mount that the demonstration was extraordinarily effective and convincing without being dangerous, although there were those among the party who could not entirely refrain from "ducking," even though this was, of course, quite unnecessary, and entirely futile.

### Testing the Supermarine S.6

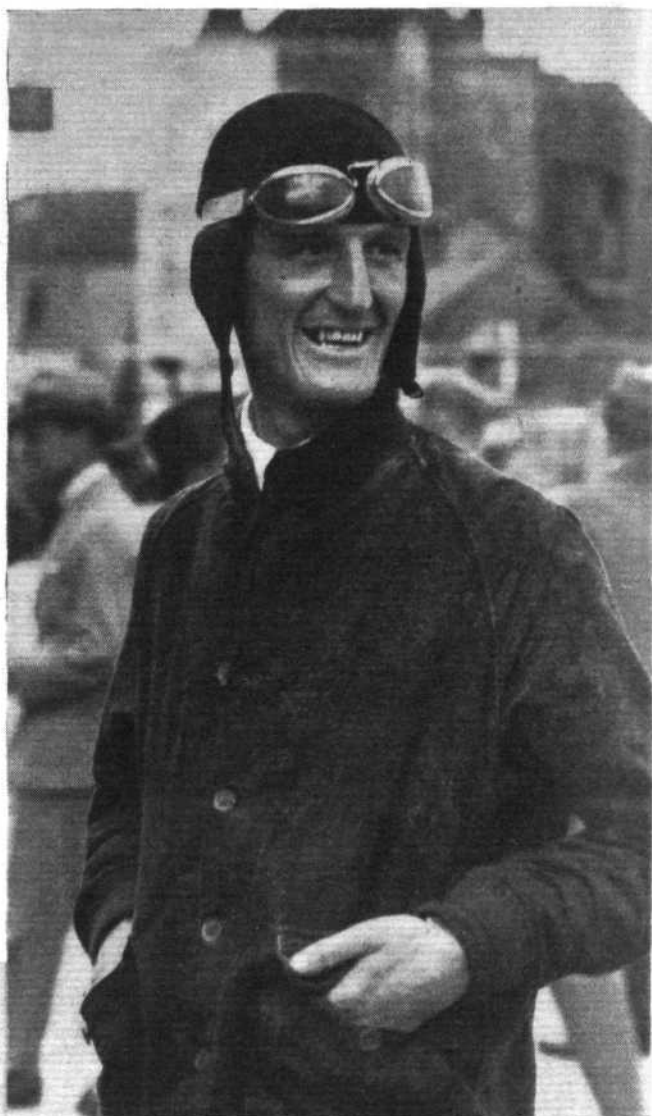
The programme of the day contemplated demonstrations by various members of the Schneider team on the 1927 machines, but as the weather was perfect and the machine all in readiness, Sqdn.-Ldr. A. H. Orlebar, captain of the team, decided to take out the new Supermarine S.6. This was an unexpected treat for the visitors, who had scarcely dared hope to see the new racer actually in flight. It was known that the S.6 had been previously flown, but needless to say, there had been no time for a really thorough test, and the pilot might well have been forgiven for postponing further flying until the visitors should have departed and Calshot be once more unencumbered by strangers within its gates.



Mr. R. J. Mitchell is Chief Engineer and Designer of the Supermarine Aviation Works, Ltd., and produced the S.5 which won the Schneider Contest in 1927, and has now produced the S.6.

That the Schneider team is devoid of nerves was obvious to the most casual observer, but it is one thing taking out a new high-speed machine when service personnel only is watching, and quite a different affair when scores of press representatives are known to be present. Personally, the writer of these notes felt uneasy at the thought that if anything *should* happen, the more thoughtful among those present could scarcely have failed to feel a measure of guilt. However, nothing untoward did happen, and the captain of the team was quite evidently entirely at his ease.

Flying Officer T. H. Moon, who, as in 1927, is the Technical Officer of the team, got into the cockpit and the Rolls-Royce "R" engine was started. When the engine had been warmed sufficiently and everything passed O.K., the engine was stopped and Sqdn.-Ldr. Orlebar got into the cockpit. The machine was lowered down the slipway and taken in tow by a motor launch, which towed it out into Southampton Water. The wind, what little there was of it, appeared to come from the south-west, and it was necessary to tow the S.6 rather a long way out. Casting off the tow line and establishing contact again by means of the flexible hose of the Bristol gas starter, the launch soon got the Rolls-Royce going, and everybody watched most intently. When Orlebar opened up the engine the machine gathered way fairly rapidly in spite of the absence of wind, and although the distance was rather too great for it to be possible for the onlookers at Calshot to see very clearly, it certainly appeared that the new floats run very cleanly. When the machine got on to its steps, it ran remarkably cleanly, and the run was not excessive considering the circumstances. As soon as the floats were definitely clear of the water the pilot could be seen to flatten out; in fact, the tail came up almost with a flick, and the acceleration was now very rapid. After flying around for some little time Orlebar headed towards Calshot and soon sped past at a terrific speed. It is, of course, practically impossible to judge such speeds with any degree of accuracy, but experienced observers agreed that the speed of the S.6



**PREPARING FOR FLIGHT :** Starting the Rolls-Royce engine of the new Supermarine S.6 by means of a Bristol gas starter. Above : the Captain of this year's British Schneider team, Sqdn.-Ldr. A. H. Orlebar, A.F.C., who flew the S.6 before a large number of Press representatives. ("FLIGHT" Photos.)



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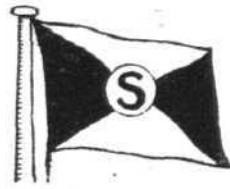
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Mr. Leete.

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Lady Bailey.

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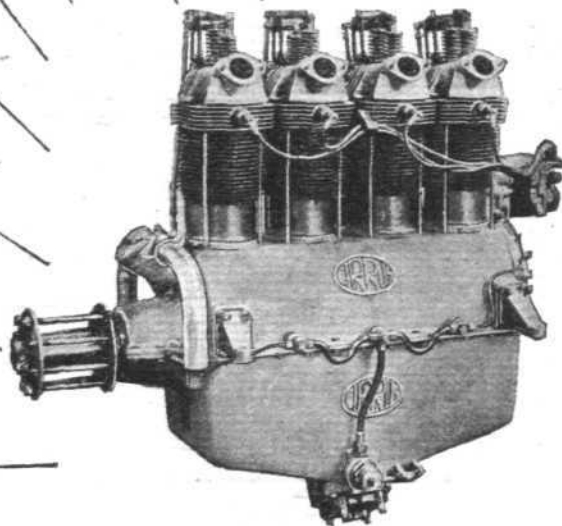
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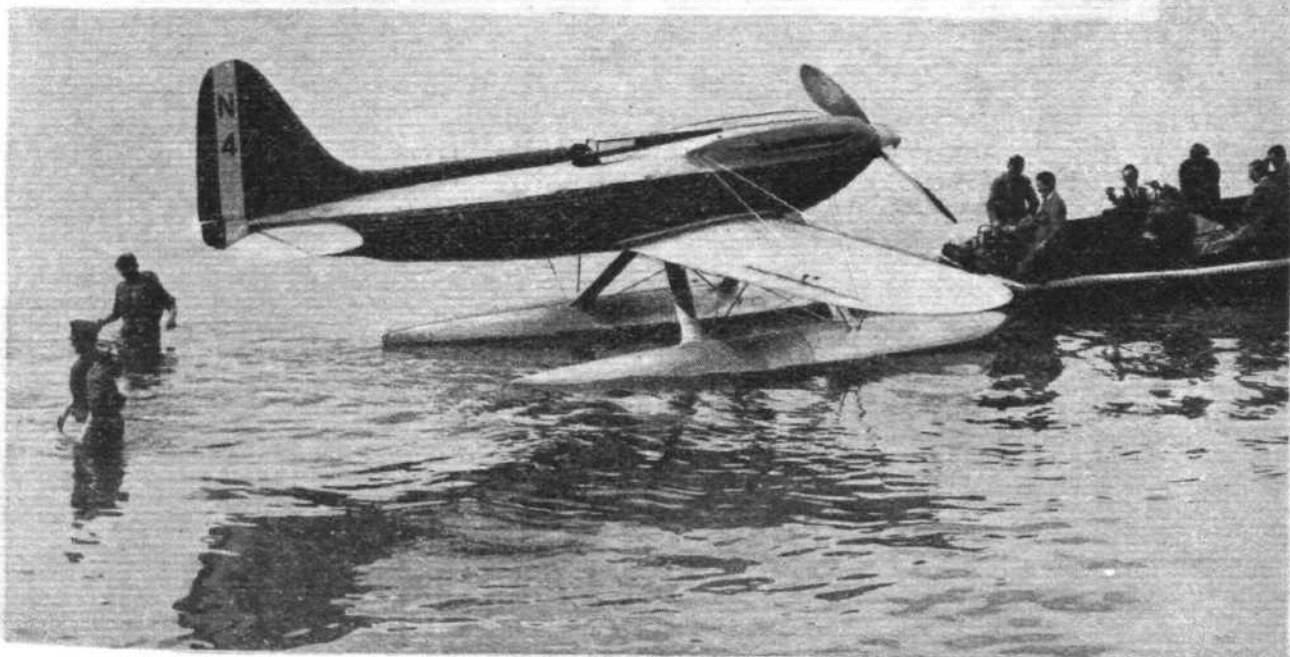
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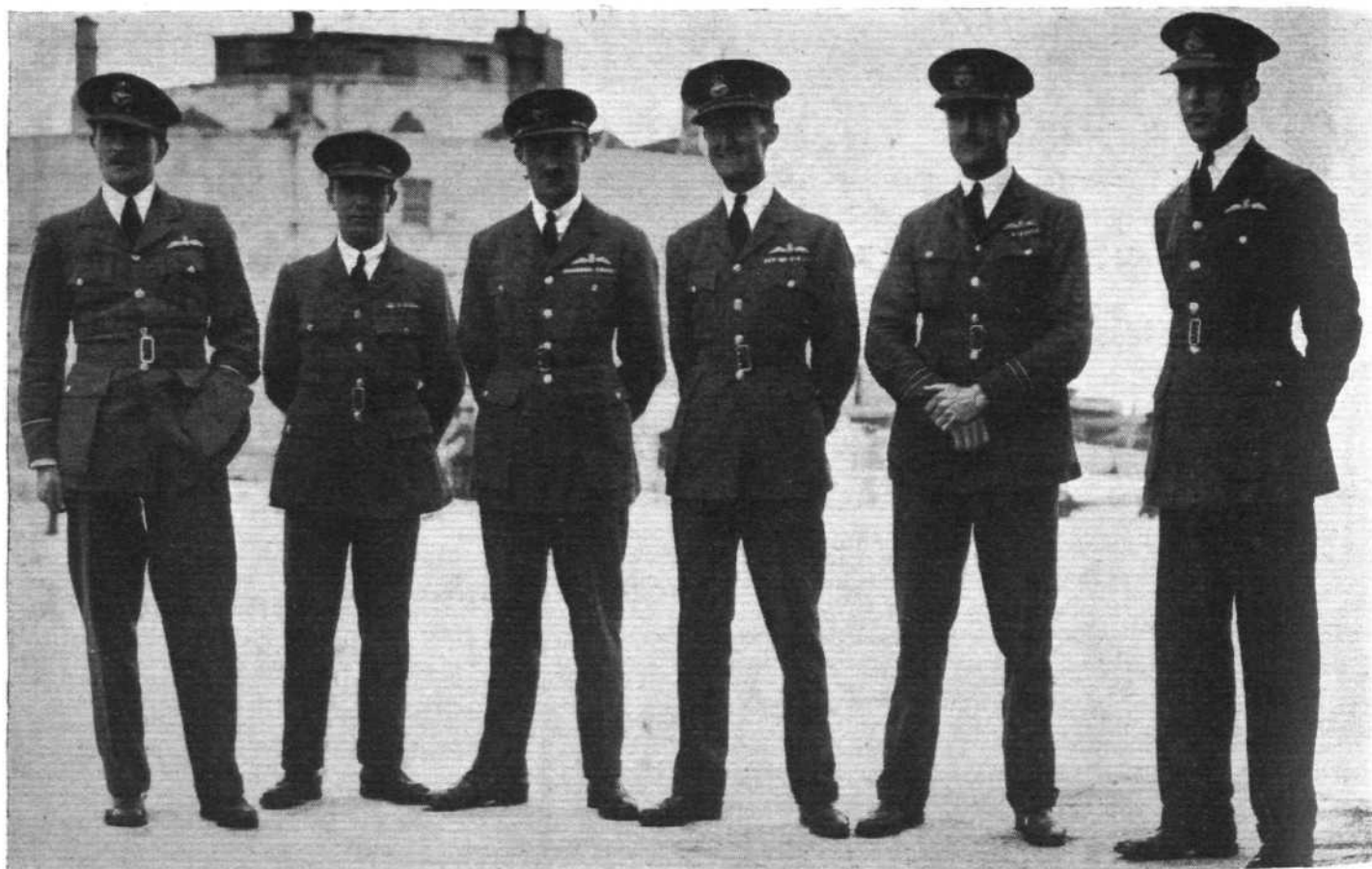
LAUNCHING THE SUPERMARINE ROLLS-ROYCE S.6: Above, Wheeling the machine down the slipway. In the centre, Taking the water. And below, The machine afloat, ready to be towed out. ("FLIGHT" Photos.)

was probably about the same as had been previously the speed of the S.5. What made it difficult to judge was the difference in the note given out by the two machines. In the case of the S.5 the note is very high pitched, almost a scream, while that of the S.6 is a much deeper note, more in the nature of a roar. The former is much more distressing and may quite possibly have given an exaggerated impression of the speed of the machine. Taking these things into consideration, one may put it with a fair degree of truth that although the S.6 was obviously not going "all out," whereas the S.5 probably was when previously flown by Waghorn, it was approximately as fast throttled as the S.5 at full speed. This should indicate that the new Supermarine racer is very considerably faster than the 1927 type, and although no reliable figures are to be had, for obvious reasons, it is not too much to hope that this year's machines may attain something like 340-350 m.p.h. on a straight-line course. It is now almost solely a question of engine power. Aerodynamic refinement cannot be carried very much further. And it seems likely that this year's engines develop something in the neighbourhood of twice the power of the 1927 engines!

they were "Moths." Truly we have a very wonderful team this year, and if we lose the Schneider contest it will certainly not be the pilots' fault. A finer set of pilots has never taken machines into the air.

#### Machines and Engines

For this year's Schneider Trophy contest Great Britain has built four machines, two of which have been built by the Supermarine Aviation Works, Ltd., and two by the Gloster Aircraft Co., Ltd. The two Supermarine machines, type S.6, are fitted with Rolls-Royce "R" type engines, and the two Gloster VI's with Napier "Lion" racing engines. As but three machines may take part in the race, one of the four machines will be in reserve. The decision as to which this will be will be taken when thorough test flights have been made. The machines have been designed and built by the two firms mentioned to Air Ministry order and under the general direction of the Directorate of Technical Development. The technical staffs of the Air Ministry, the Royal Aircraft Establishment, Farnborough, and the National Physical Laboratory have co-operated with and assisted the firms concerned wherever possible.



THE BRITISH SCHNEIDER TEAM, 1929 : From left to right, Flying-Officer H. R. D. Waghorn, Flying Officer T. H. Moon, Flight-Lieut. D. D'Arcy Greig, D.F.C., A.F.C., Sqdn.-Ldr. A. H. Orlebar, A.F.C., Flight-Lieut. G. H. Stainforth, and Flight-Lieut. R. L. R. Atcherley. ("FLIGHT" Photo.)

After flying around for some little time Sqdn.-Ldr. Orlebar came down low to alight. His manoeuvre was watched with the greatest intentness by the onlookers, and he made an absolutely perfect landing, the float heels at first sending up tiny wisps of white spray, which gradually became larger as the floats slowly dug in until the floats submerged their steps; after that the machine came to rest in a few yards, the tail tilting up and the floats sinking their noses in up to the deck, but the machine showing no tendency to nose over. Thus ended what must be regarded as an historic flight, a test of a new machine before a large number of onlookers.

After lunch in the tent erected within the air station by the Royal Aero Club, Flight-Lieut. Stainforth and Flying Officer Atcherley went out in the Gloster IV's with Napier engines, and gave perfectly amazing demonstrations. Regarded with something like awe two years ago, the 1927 Schneider machines are now used by this year's team as training machines and treated as "hacks." In fact, the 1929 team appear to be as unconcerned flying them as if

The Supermarine S.6 racing seaplane, two of which have been built, is a low-wing monoplane of all-metal construction, and is a development of the S.5 which won the Schneider Contest in 1927 and on which, in 1928, Flight-Lieut. D'Arcy Greig established a British speed record, as previously mentioned. The S.5 still holds the world's speed record over a distance of 100 km., and the fastest time over a 3-km. course. In a general way the S.6 resembles the S.5, but it is slightly larger as a result of the increased engine weight and size. In fact, it is probably fairly correct to assume that the weight has been nearly doubled in the S.6 as compared with the S.5, while the power has, most likely, been more than doubled, so that the power/weight ratio has been improved.

Among the features of the S.6 mention may be made of its all-metal construction. This extends not only to the fuselage and wing structures, but also to the wing covering, which is in the form of wing surface radiators consisting of two thicknesses of duralumin with a very narrow waterway between them. The radiators are built up to form part of the stress-resisting structure; and contribute a good deal to the torsional

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**THE HIGHEST SPEED IN THE AIR** was accomplished by Flight-Lieut. D. D'Arcy Greig with a Supermarine seaplane with **NAPIER** engine—speed 319½ m.p.h.

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ONE OF THE BRITISH 1929 DEFENDERS : The Supermarine S.6 is an all-metal low-wing monoplane, fitted with Rolls-Royce "R" type engine. ("FLIGHT" Photos.)

stiffness of the wing. The outer surface is perfectly flat, and thus the radiators add nothing whatever to the air resistance of the machine.

The fuselage is a duralumin structure in which the skin is quite heavily loaded. The engine mounting also has a substantial skin or shell, which is made strong enough to resist both the bending loads resulting from the weight of the engine, and the torque loads caused by the torque reaction of the engine. Bending is relieved a good deal, as compared with the S.5, by the moving forward of the forward float struts, which help to support the engine weight. In the S.5 this was supported *en porte a faux* by the engine mounting.

The two floats are mainly of duralumin construction, with the exception of the central portion, which forms a petrol tank and is made of steel. The oil tank is situated in the tail fin, the surface of which forms an effective oil cooler, in addition to the corrugated surface conduits which lead the oil from the tank and forward to the engine along the sides of the fuselage. The propellers to be used on the S.6 machines have been designed and constructed by the Fairey Aviation Co., Ltd., and also by the Supermarine Aviation Works under Fairey-Reid Licence.

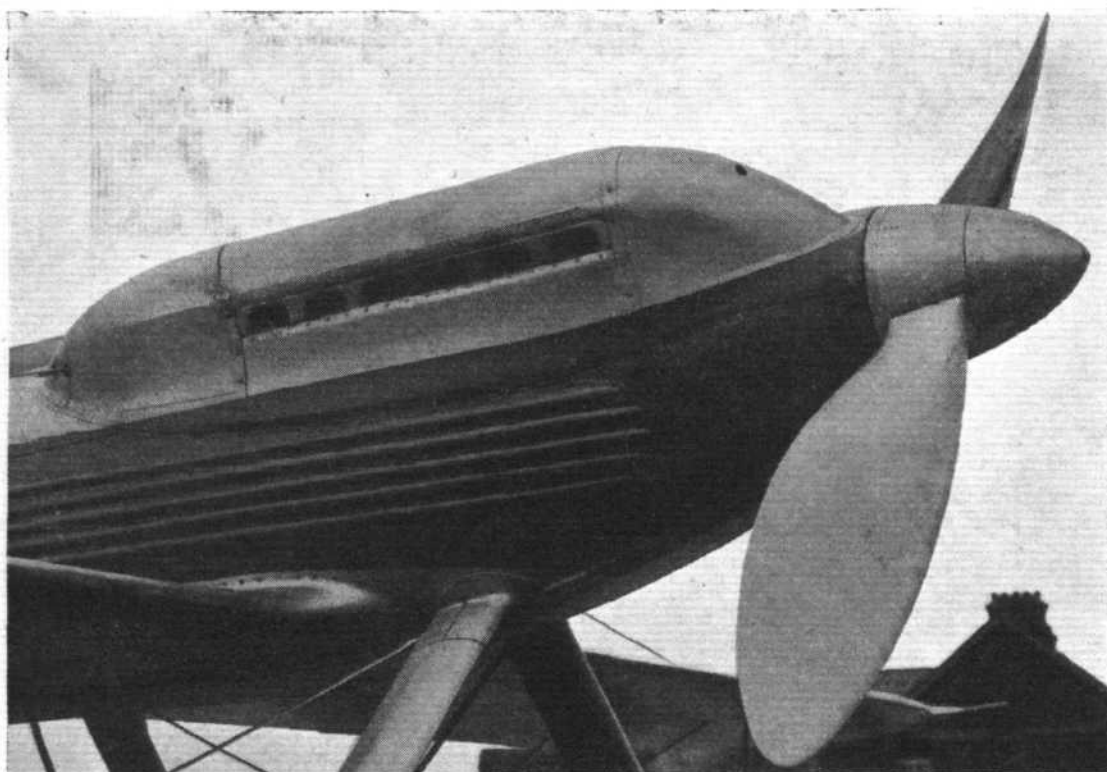
The Rolls-Royce "R" racing engine may be said to be the

racing version of the "H" type shown at Olympia recently, where it attracted widespread attention. Of the 12-cylinder 60° Vee water-cooled type, the "R" type engine develops a good deal more than the "H" type, which has an output of 830 h.p. No information may be given concerning the means whereby the extra power is obtained, but it may be assumed that a higher compression ratio, greater engine speed and a special type of supercharger are the main contributing features. The frontal area has been kept remarkably small for an engine of such high power, and the propeller reduction gear is of special type to enable a good streamline form to be retained.

#### The British Schneider Team

The British Schneider Trophy Team for 1929 is composed of six Royal Air Force Officers and a number of R.A.F. mechanics. Together this personnel bear the official designation of the "High-speed Flight." They are being assisted by certain members of the technical staffs of the firms constructing the aircraft and engines. The flying members of the team are: Squadron Leader A. H. Orlebar, A.F.C., Flight Lieutenant D. D'Arcy Greig, D.F.C., A.F.C., Flight Lieutenant G. H. Stainforth, Flying Officer R. L. R. Atcherley, and Flying Officer H. R. D. Waghorn. Flying Officer T. H.





The Business End of the Supermarine S.6: Of the Rolls - Royce "R" type engine nothing is seen but the exhaust ports.

("FLIGHT" Photo.)

Moon, who was the Technical Officer of the 1927 British Schneider team, is again responsible for the technical side. The three officers who will pilot the British defenders will be selected later from the flying members of the team.

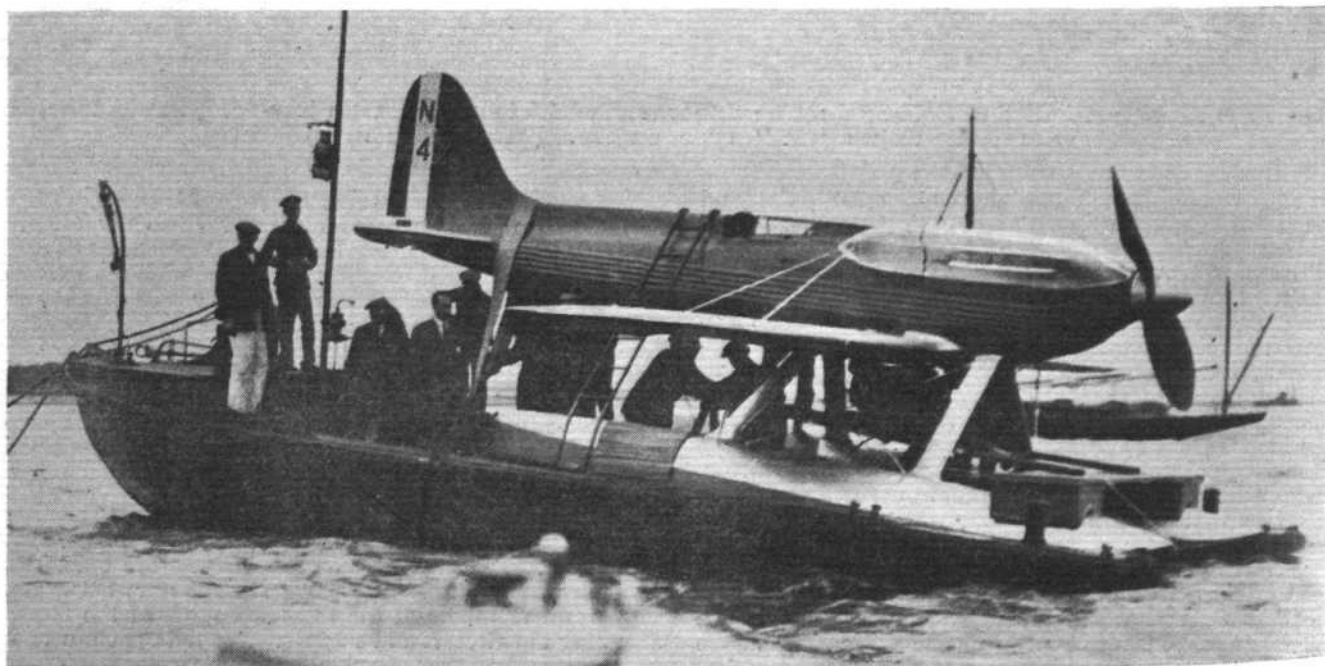
The "High-speed Flight" was originally formed at Felixstowe, and was transferred to Calshot some months ago for training purposes. All the officers of the flight, with the exception of Squadron Leader Orlebar and Flying Officer Moon, were Instructors together at the Central Flying School at Wittering. After being posted to the High-speed Flight each officer began training on seaplane types beginning with the Fairey "Flycatcher" and the Avro "Avocet." From these they passed for advanced training to the Gloster-Napier IV which had taken part in the 1927 contest and which has since been slightly modified by raising the upper wing to give an improved view. All the pilots have also flown the Supermarine-Napier S.5 which won the 1927 contest.

Squadron Leader A. H. Orlebar, A.F.C., the Captain of the British team, was born at Higham Ferrers, Northants, in 1896 and was educated at Rugby. Joining the 5th Battalion Bedfordshire Regiment (T.F.) as a 2nd Lieutenant early in 1915, he went with his unit in September to Gallipoli, where he was wounded shortly afterwards.

The following year he became a flying officer in the Royal Flying Corps, graduating as a pilot at the Central Flying School, and saw service in France with No. 19 Squadron, with No. 73 and with No. 43. He was wounded a second time while serving with No. 73 Squadron.

When the war ended he had reached the rank of Captain in the Royal Air Force and was soon afterwards granted a permanent commission as Flight Lieutenant. Since then he has been engaged on various flying and air staff duties, including a period at Martlesham Heath as a test pilot with No. 22 Bombing Squadron, and on the headquarters staff in Iraq. He was awarded the Air Force Cross for valuable flying services in 1921 and graduated at the Royal Air Force Staff College in 1926. Before being posted early this year to be Officer Commanding the High-Speed Flight, Felixstowe, he was employed in the Directorate of Organisation and Staff Duties at the Air Ministry.

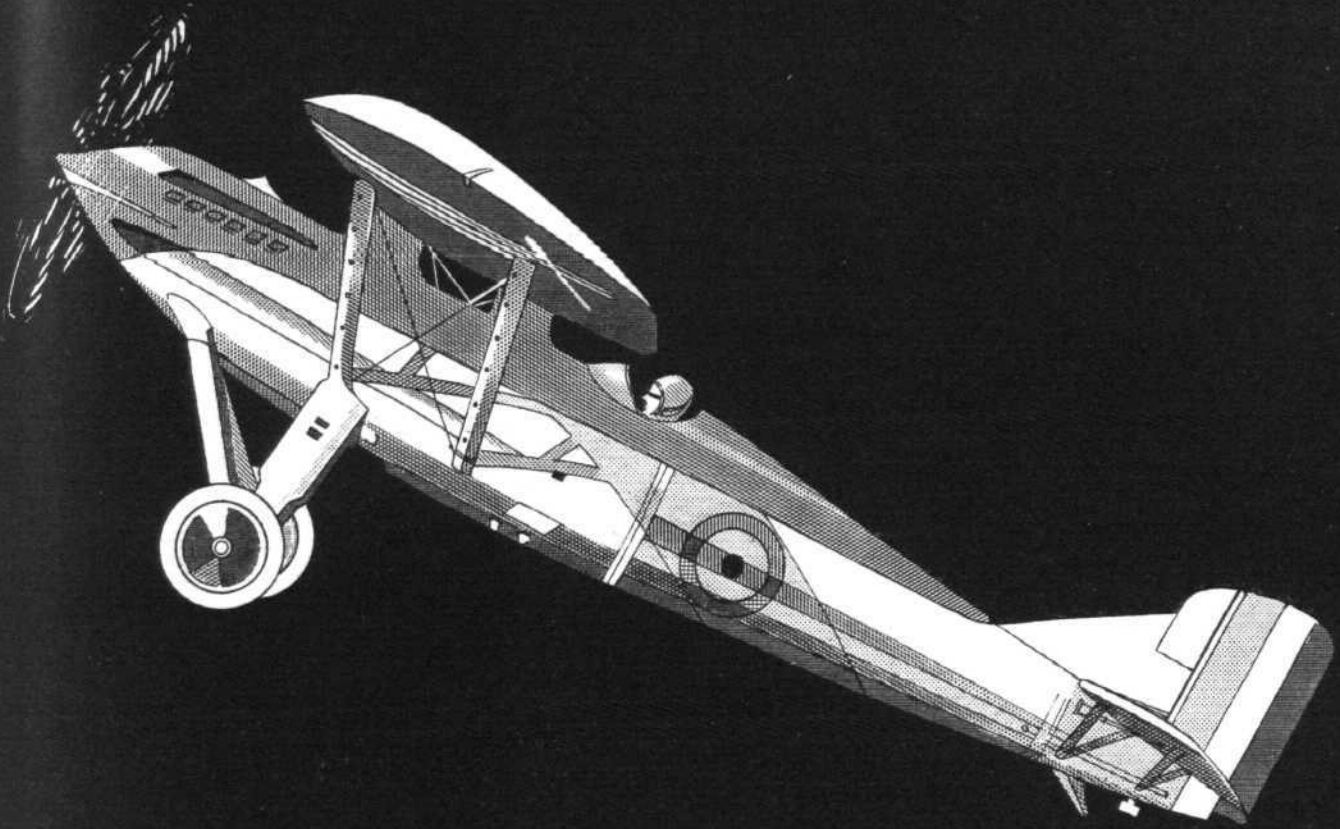
Flight Lieutenant D. D'Arcy Greig, D.F.C., A.F.C., the holder of the British seaplane speed record, was born in 1900 at New Spynie, Elgin, and was educated privately. He entered the Royal Air Force as a cadet in February, 1918, and, after qualifying as a pilot, received a Commission as 2nd Lieutenant in June. He was posted for duty in



A WEIRD CRAFT : The Supermarine-Rolls-Royce S.6 on board one of the special pontoons used for transport purposes.



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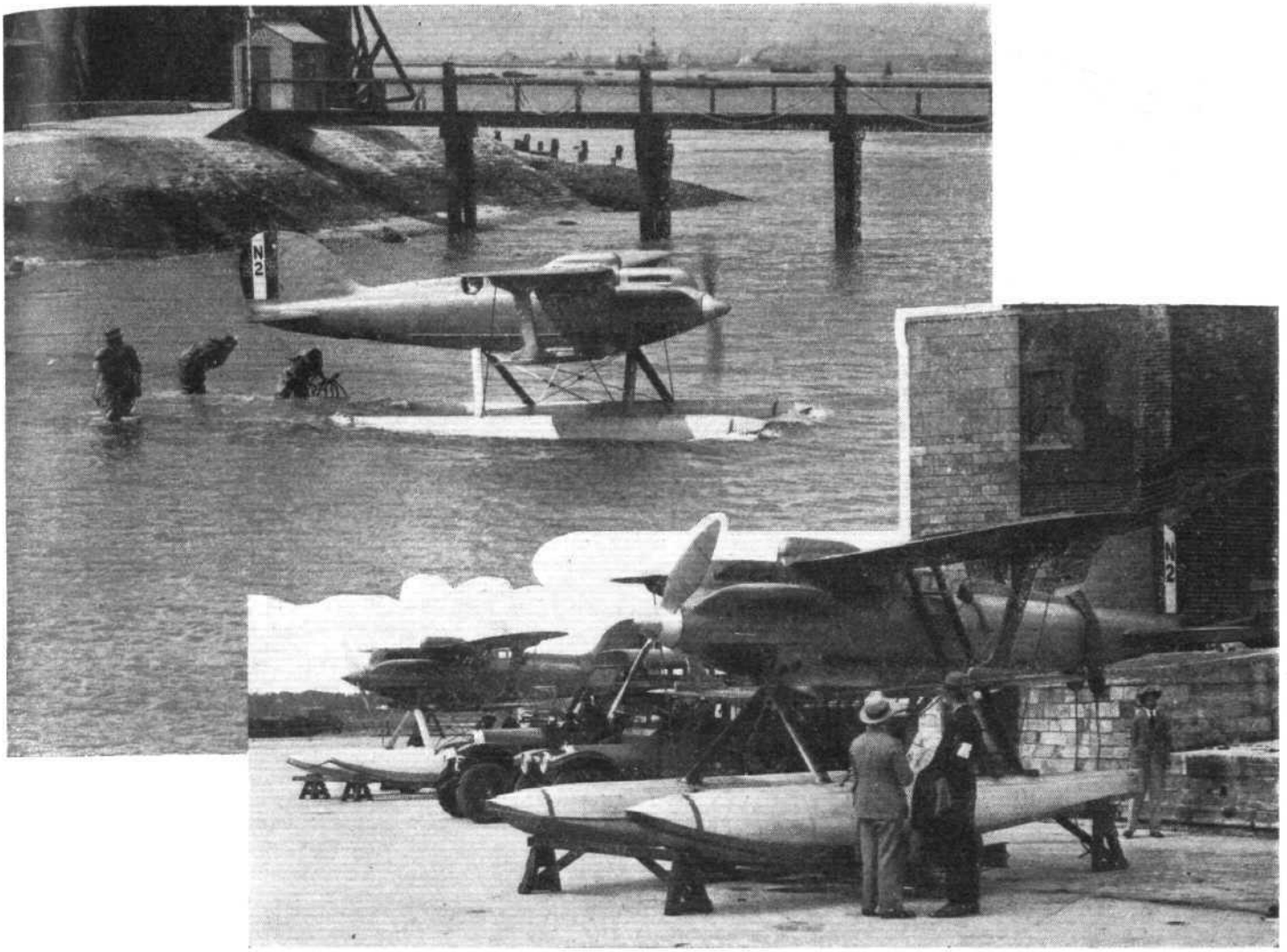
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**TWO OF THE TRAINING MACHINES :** Two Gloster IV's with Napier "Lion" engines are being used for practice purposes by this year's Schneider team. ("FLIGHT" Photos.)

August to No. 83 Squadron in France and was shot down while flying an F.E.2.B. machine by an enemy aircraft. Landing safely at a point twelve miles behind the enemy trenches his observer and himself made a successful escape during the night through the enemy lines.

Soon after the war he proceeded overseas to No. 6 Squadron, Iraq, and was awarded the D.F.C. for distinguished service in the field. On returning home he served for a short time with No. 24 (Communication) Squadron and then became an instructor at the Central Flying School. In 1928 he was appointed flying examining officer in the Fighting Area of the home defence force, and on the death of Flight Lieutenant Kinkead last year was posted to the High-Speed Flight.

*Flight Lieutenant G. H. Stainforth* was born at Beckenham in 1899 and educated at Dulwich, Weymouth and Sandhurst. In August, 1918, he received a commission in the Buffs and after a short period in France saw foreign service with his battalion in India (1920), Iraq (1921) and Aden (1922). He retired from the regular Army in 1922 and was granted a short service commission in the Royal Air Force in the following year.

After graduating as a pilot in 1924 he was posted to No. 19 (Fighter) Squadron, one of the home defence units, and later became a flying instructor in No. 4 Flying Training School in Egypt. In 1927 he went to the Central Flying School as an instructor, and in the autumn of last year joined the High-Speed Flight. He flew with Flying Officer Atcherley in the Gloster "Grebe" which won the King's Cup Air Race in July.

*Flying Officer R. L. R. Atcherley* belongs to Micklegate, Yorks. He was born in 1904 and was educated at Oundle. He joined the Royal Air Force as a cadet in 1922, and after graduating from the Royal Air Force College, Cranwell, was posted in 1924 to No. 29 (Fighter) Squadron. After a course at the Central Flying School he became a flying instructor with his old squadron and later held a similar post in No. 23 (Fighter) Squadron. He returned to the Central Flying School in 1926 as a flying instructor. In October of last year he joined the High-Speed Flight. Flying a Gloster "Grebe" he won the King's Cup in this year's Round Britain air race, passing the winning post about

one second ahead of the next competitor after a flight of over 1,000 miles.

*Flying Officer H. R. D. Waghorn* is a London man, having been born in Kensington in 1904. Educated at Wellington, he proceeded in 1922 as a cadet to the Royal Air Force College, Cranwell, where he was a contemporary of Flying Officer Atcherley.

On graduating in 1924 he was posted to No. 17 (Fighter) Squadron, and after taking a flying instructor's course in 1926 at the Central Flying School became an instructor there. He remained at the School until February of this year when he joined the High-Speed Flight. He is a noted skier.

It will be observed that Flight Lieutenants Greig and Stainforth and Flying Officers Atcherley and Waghorn were fellow instructors at the Central Flying School. While instructing there they gave, along with a fifth pilot, a notable demonstration of aerobatic flying in formation at the Royal Air Force Display in 1927.

*Flying Officer T. H. Moon*, Royal Air Force, the technical officer of the team, is a Devon man. He was a chief petty officer on the engineering side in the Royal Naval Air Service when war broke out and was made a warrant officer in 1917. When the fusion of the flying services took place in 1918 he became 2nd Lieutenant Royal Air Force on technical duties and was later promoted Flying Officer. He served throughout the war with the flying services, and has seen service with the Royal Air Force in Egypt, Iraq and the Middle East. He was responsible for the technical organisation of the winning British Schneider team in 1927 and is again in charge of the technical side of the British effort.

#### Australian Air Survey

On August 11 a Central Australian air survey expedition left Adelaide for Birdsville, where 300 miles of unexplored country will be surveyed. On the flight the machines passed above lakes which had apparently dried up, and whilst skirting Lake Eyre they passed through a rain storm and landed at Marree with only half-an-hour's petrol supply left. When full of water, Lake Eyre formerly covered 1,000 square miles. The aeroplanes are in constant wireless communication with Melbourne.



# AIRISMS

## FROM THE FOUR WINDS.

### Graf Zeppelin's Record Return Flight

THE cruises of the *Graf Zeppelin* across the Atlantic in either direction are now almost a matter of ordinary interest. The world has become used to its smooth and uneventful passages, and no longer hangs on to every report of its progress in anticipation of a sensation. We reported last week the arrival of the airship at Lakehurst, in America, from Germany. Its return flight began on August 8, at 6.39 a.m. (B.S.T.), and it passed over New York City an hour later, flying towards Cape Race, Newfoundland. At 8 p.m. that night it wirelessed its position as 900 miles east of New York, and speed 67 m.p.h. Three liners had sighted it during that stage. Following a course almost due east, it was reported in the neighbourhood of the Azores at about midday on Friday, and then actually passed the Azores about 5 p.m., striking a more northerly course. It was anticipated that the airship would cross Southern Ireland and Southern England, possibly appearing over London, but according to reports at present to hand it did not reach a point nearer to Land's End than the Scilly Isles, which are about 45 miles south-west. It passed over Paris at 1,500 ft. early on Saturday morning, and Dr. Eckener, the commander, sent a wireless message to M. Laurent Eynac, the French Minister for Air, conveying greetings. The Air Minister reciprocated with a message of congratulation on the successful flight. In wind and rain it reached its port at Friedrichshafen at 1 p.m. on Saturday. The time taken for the homeward voyage was 55½ hours, a record trip. Favourable winds had prevailed throughout, whilst the weather generally was fine. There were 18 passengers on board, including Lieut.-Comdr. C. E. Rosendahl, Lieut. J. C. Richardson, U.S.N., Sir Hubert Wilkins, Mr. W. B. Leeds, and Lady Drummond Hay. A considerable quantity of mail was also carried. The *Graf Zeppelin* is expected to start its world cruise any day. Tokio is said to be the first port of call.

### Russian Flight to America Begins

THE Soviet aeroplane "Strane Sovietoff" ("Land of the Soviets") left the central aerodrome in Moscow on a flight to America via the Pacific at 2.52 a.m., on August 8. The course will be via Omsk, Krasnoyarsk, Chita, Khabarovsk, Nikolaevsk, the Aleutian Islands, Seattle, San Francisco, and New York, a distance of about 12,000 miles. It is intended to discard the wheels for floats at Khabarovsk and refit the wheels at Seattle. The pilots are Shestakoff and Bolotoff. The "Land of the Soviets" arrived at Omsk at 4.48, the same day, after covering a distance of about 1,380 miles without stopping.

### South American Air Mail Mishap

ONE of the machines carrying the South American air mail which left Dakar, on the north-west coast of Africa, last Thursday, was obliged to make a landing in unsubmitted territory. It is understood that the crew were uninjured, but made prisoners by the Ait-Be-Amraua. An official of the air mail company has left for Tizuit to arrange for their ransom.

### French Airmen Honoured by Spain

AT the Madrid Aero Club a banquet was recently given in honour of the French airmen, MM. Assolant, Lefevre and Lotti, who flew from America to Spain in June this year.

### Mr. Duke Schiller Missing

It is reported that Mr. Duke Schiller, who is a prominent Canadian pilot, is missing. He came to public notice in connection with the relief of the *Bremen* crew when they landed on Greenly Island, Labrador, after making the first heavier-than-air flight across the Atlantic from east to west. Mr. Schiller is reported lost within an area of 300 miles of the Arctic Circle, together with a mechanic and prospector. They had set out on a prospecting trip in the neighbourhood of Wager Bay, in the north-west extremity of Hudson's Bay.

### New Channel Air Service

A NEW Paris-London Air Service, organised by the Piccadilly Bureau in conjunction with the Air Union, was inaugurated on August 11. The object is to enable Parisians to dine, witness a play in London, and be back in time for their work in Paris the next morning. On August 11, eleven passengers left Paris at 4 p.m. and were able to carry out this programme.

### U.S. Air Development.

A GROUP of bankers and industrialists has organised the New York, Rio de Janeiro and Buenos Aires Air Line, Incorporated, which will soon start a passenger and express mail service by aeroplane between New York and Buenos Aires. At first, trips will be made weekly in both directions. It is proposed to establish a tri-weekly service within a year, and eventually a daily service. The flying at first will be all by day, and the 8,000 miles journey will be covered in seven days, a saving of eight days as compared with the steamship journey. The aeroplanes will stop at several cities in the United States, and in Cuba, Haiti, Santo Domingo, Porto Rico, the Lesser Antilles, the Guianas, Brazil, Uruguay, and the Argentine, following the course which has already been explored by Colonel Lindbergh. Night flying, which will reduce the time to four days, will be resorted to when beacons have been installed along the route.



**AUSTRALIAN AIR MAIL DEVELOPMENT:** Arrival of the first Air Mail at Brisbane from Charleville, on April 22, flown by the D.H.61 (Bristol "Jupiter") "Apollo," operated by the Queensland and Northern Territories Aerial Services, Ltd. The distance of 444 miles is covered in 5½ hours.

# India & Back Flight

The spirit supplies for the Duchess of Bedford's remarkable flight to India and back were provided at all points on the route, with the exception of Karachi, by the British Petroleum Company, Limited.

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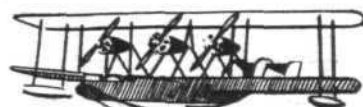
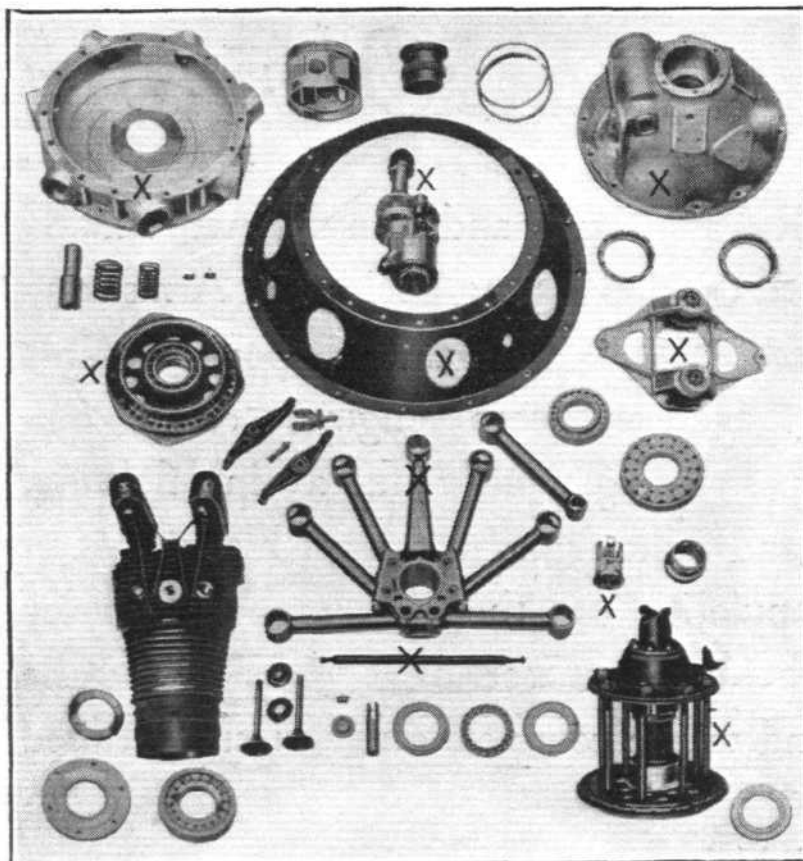
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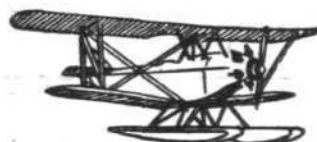
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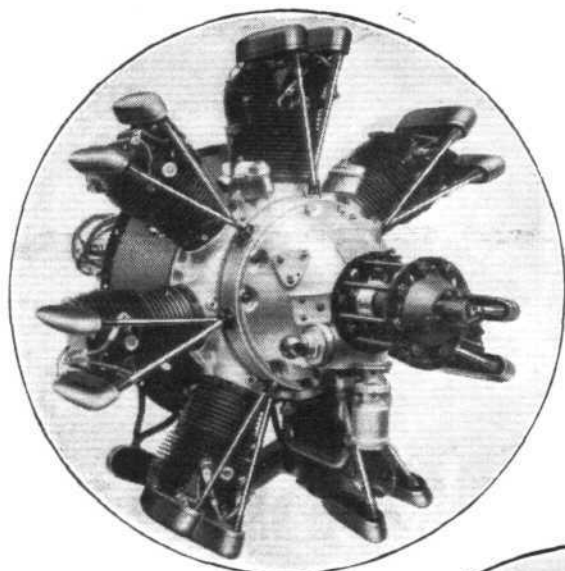


Fokker VII 3M 3 Lynx,  
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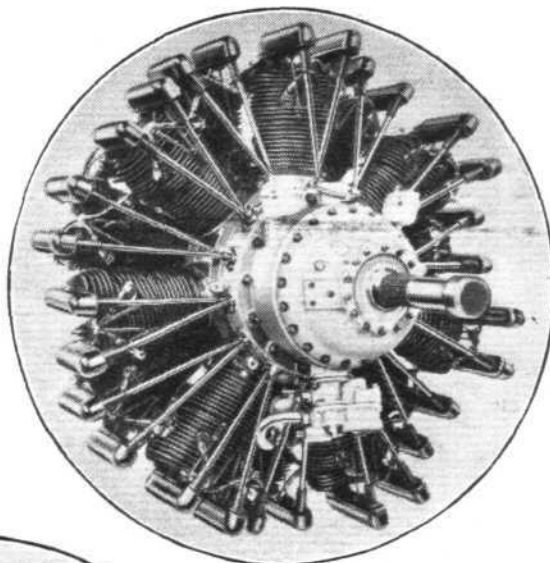
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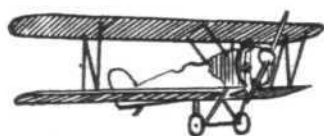
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Hawker Tomtit-Mongoose,  
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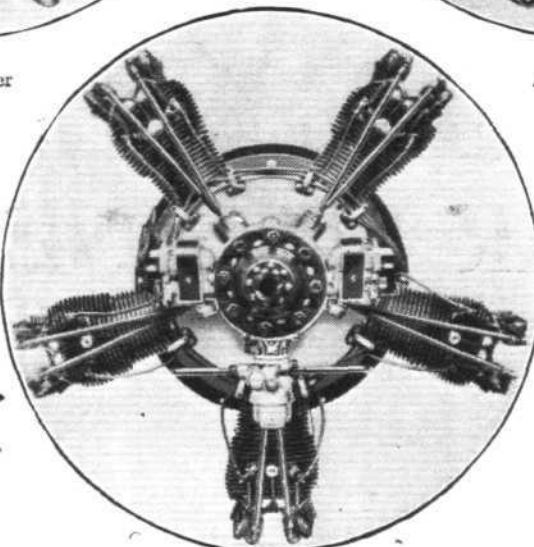
Fokker-Mongoose,  
Land Training.



Avro-Mongoose,  
Land Training.



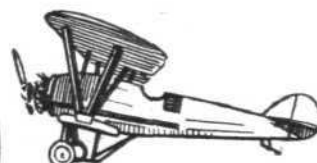
Blackburn Lincock-Lynx,  
Land Fighter.



Armstrong Siddeley 5-cylinder  
150-165 Mongoose.



Argosy 3 Jaguars,  
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Siskin-Jaguar,  
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"Daily News,"  
27th June, 1929

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## INTERNATIONAL LIGHT 'PLANE TOUR OF EUROPE

## Three British Pilots Set the Pace.

THE story of the progress of the light 'plane tour of Europe almost entirely centres upon three British pilots, although the forty-three competitors who started from Orly, near Paris, comprised numerous nationalities. At almost every landing point, Capt. Broad, flying a Gipsy-Moth, Miss Winifred Spooner, flying a Gipsy-Moth, and Mr. John Carberry, flying a Raab-Katzenstein with Cirrus-Hermes engine, shared the first three places in varying order. Of course, it must be remembered that their lead did not necessarily mean that they were winning the whole competition. The conditions of the contest imposed more than mere speed on the machines. Points won in the preliminary tests at Orly have to be introduced into the final judgment and verdict. But at the same time these British pilots had already established an excellent position before the tour, so that their sustained lead is almost an indication of their final positions.

It was on August 7 that the 43 machines were started from Orly for the 4,000-mile tour in an anti-clockwise direction round Europe. They left at 5-minute intervals. Two returned after 30 mins. in the air, and three failed to take off. Miss Spooner and Capt. Broad left together. The first stage led to Basle, where Mr. Carberry arrived first. He maintained his lead at Geneva and Lyons, where Capt. Broad and Miss Spooner followed him in. Passing on to Marseilles and then St. Raphael, their landings were reported at Turin in the following order: Mr. Carberry, Capt. Broad, Herr F. Altemeir (flying a R.K.25 (Cirrus)), and Miss Spooner.

The first two left after 30 mins. sojourn for Milan, Venice and Zagreb, which Capt. Broad reached first, followed closely by Miss Spooner and Mr. Carberry, thus taking the lead from the latter, who had maintained an advantage right from Orly to Venice. Two competitors had abandoned the race by then. A German and a Czechoslovakian pilot landed in the vicinity of Marseilles and retired, whilst Capt. Ferrarin, the Italian pilot, damaged his Breda 15 machine when landing at Turin, but was able to resume later.

Capt. Broad flew on to lead at Belgrade followed by Mr. Carberry and Miss Spooner. Herr Lusser and Herr Siebel, German pilots (Klemm-Salmsons) reached this place too late in the evening to carry on immediately, but all the competitors who arrived made excellent landings and had been favoured with fine weather through Yugo-Slavia. The French pilot, M. Delmotte, on a Caudron (Renault) was considered well placed at this stage. At Bucharest he arrived first, but the tenacious British trio were on his tail, and at the next landing point, Vienna, Carberry led with Broad and Miss Spooner following. It appeared that Miss Spooner lost time at Budapest owing to a slight dispute with Customs over a visa which she apparently did not have.

As the first to arrive at Vienna Mr. Carberry won a prize. Among the other pilots to land there were Herr Kirsch (Klemm-Siemens), Mr. Kleps (Avia (Walter)), Herr Offermann (B.F.W. (Siemens and Halske)), and many Italians. Altogether 18 machines reached there safely.

At Prague Broad led Miss Spooner. Delmotte left Vienna for Prague, but lost his bearings and returned. He re-started however, and reached Brunn. The positions at Prague, showed that Mr. Carberry's flying time up to that stage was 23 hrs. 18 mins., Broad's was 24 hrs. 18 mins., and Miss Spooner's 25 hrs. 12 mins.

By leading at Breslau a prize was won by Capt. Broad,

awarded by the city. Herr Kirsch was second. Owing to unfavourable weather no competitor got through to Warsaw on August 11, but the following day Broad reached there first, with Miss Spooner second. One of the Italian machines was obliged to land at Lodz on this stage before continuing. Capt. Broad led at Berlin with Miss Spooner, Mr. Carberry and Herr Kirsch following. All started the same day for Hamburg with the exception of Mr. Carberry, who was unfortunately delayed by a broken oil-pipe. He was unable to leave until the following day.

Hamburg was reached by the two Gipsy-Moths at 5.15 p.m., and the tour was continued a few minutes later to Amsterdam, but the lead was taken by the German, Herr Kirsch, who landed three-quarters of an hour before them. Mr. Carberry drew up at this stage. Thirty-three competitors were still in the race. There were only two stages left—Brussels and Orly—which had not to be reached until August 14. This meant that the leading competitors had to retard their progress, which, of course, gave others a chance of catching up. It also reduced averages. Capt. Broad, Miss Spooner and Mr. Carberry had averaged 700 miles a day, but this would be reduced automatically under the rules to 500 miles a day. Incidentally, Lady Bailey, who was eliminated from this competition through arriving late at Orly on August 3, entered for the tour unofficially, and is completing the course although in no way attempting to enter into rivalry with the competitors.

As we go to press we learn that Captain Broad reached Brussels first, followed by Mr. Carberry, Miss Spooner, Herr Roeder, Herr Offermann and Mons. Delimotte.

## Points for Preliminary Tests

The following points have been awarded for the preliminary tests concerning construction, dual control, parachute installation, protection against fire, fuel consumption, take-off, folding and erection qualities. These points will be added to the points awarded for the European Tour, which concludes as we go to press, and the total will decide the winners:—

Herr Thomas (B.F.W.), 25; Herr Offermann (B.F.W.), 14; Herr Dungen (B.F.W.), 20.25; Herr Morzik (B.F.W.M.), 19.50; Herr Groneiss (B.F.W.M.), 15.25; Herr Altemeir (R.K.25), 12; Mr. Carberry (R.K.25), 12; Herr Nehring (D.18), 32.50; Herr Ziegler (Albatross), 21.50; Herr Junk (Albatross), 25.25; Herr Hirth (Klemm), 29.50; Herr Lusser (Klemm), 30.50; Herr Kirsch (Klemm), 18.25; Herr Hagenmeyer (Klemm), 17.75; Herr Siebel (Klemm), 30.25; Herr Poss (Klemm), 30; Herr Kneer (Junkers 50), 29.50; Herr Roeder Waldem (Junkers 50), 30.25; Mons. Delmotte (Caudron), 18; Mons. Barbot (Caudron), 12.75; Mons. Lemerre (Caudron), 15; Mons. Bayol (Potez), 20.50; Mons. Finat (Potez), 18.50; Mons. Vuylstecke (St. Hubert), 15.75; Capt. Broad (Gipsy-Moth), 26.25; Miss Spooner (Gipsy-Moth), 22.50; Signor Lombardi (A.S.I.), 18.50; Signor Donati (Fiat A.S.I.), 17.50; Signor Suster (Fiat A.S.I.), 18; Signor Stoppani (Cant. 26), 27.25; Signor Banassati (Romeo 5), 19.25; Signor Gelmetti (Romeo 5), 18; Signor Castaldo (Romeo 5), 25.25; Signor Guazzetti (Romeo 5), 28.25; Signor Liberati (Breda 15), 24; Signor Ferrarin (Breda 15), 26; Signor Mazzotti (Breda 15), 24.25; Mons. Burhard (Klemm), 24.50; Mr. Kleps (Avia), 32.50; Mr. Visek (Avia), 29; Mr. Novak (Aero 34), 26.25.

## A "Gadfly" Record

THE Royal Aero Club have informed Glenn-Henderson that they have heard from the Federation Aeronautique Internationale that the height attained, viz., 3,021 metres, by the Glenn-Henderson monoplane "Gadfly" on May 16 last had been passed as a world's record for single seater light aeroplanes (4th category) weighing not more than 200 kilos.

## An Apt Pupil

MISS SALE-BAKER, who won one of the competitions on the Reid-Sigrist pilot-testing apparatus at the Olympia Aero Show, and has since been trained to fly by Flying-Officer H. M. Schofield at the National Flying Services aerodrome, Handworth, has flown solo after seven hours' instruction, which is a testimony to the effectiveness of the apparatus.



The Duchess of Bedford at the conclusion of her longest private air tour at Croydon after flying 1,400 miles non-stop from Sofia on the return from India. With the Duchess, who is holding a bouquet, is her pilot, Capt. C. D. Barnard.

## DUCHESS OF BEDFORD'S RECORD FLIGHT

### England—India—England in Eight Days

THE fastest return flight between England and Karachi, in India, has been accomplished by the Duchess of Bedford, one of our most distinguished private owners of aircraft. In eight days her monoplane covered nearly 10,000 miles without the slightest hitch. It was a Fokker monoplane fitted with a Bristol "Jupiter" engine, piloted by Captain C. D. Barnard, who is a private pilot to the Duchess, with Mr. Bob Little as mechanic.

On Friday, August 2, *The Spider*, as the machine was named, took off from Lympne Aerodrome, near Folkestone, at 5 a.m., having a petrol capacity equal to about 16 hours' of flying. That same evening they landed at Sofia, in Bulgaria, having flown 1,400 miles across Europe non-stop. The next day they flew the second stage to Aleppo, in Asia Minor, a distance of nearly 900 miles. A long flight of 1,000 miles across the desert took them to Bushire on the



Return of "The Spider." A successful finish to the flight to India and back. Landing at Croydon on August 9. ("FLIGHT" Photo.)

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An aerial view of the Fokker monoplane gliding into London's air port at Croydon.

following day, August 4. Then came the last stage on the outward course on August 5 with a non-stop flight down the Persian Gulf to Karachi, the aerial gateway to India.

The entire outward distance of 4,350 miles had taken 3 days, 9 hrs.

A great welcome was accorded the Duchess of Bedford at Karachi, particularly by women. But no time was wasted by her and her crew in India.

#### Karachi—Croydon.

The return flight began the next day, August 6, over the same direct course. Bushire was reached in the evening after 11 hrs. in the air. Crossing the desert again on August 7 brought them to Aleppo once more, then followed the entry into Europe with a flight to Sofia on August 8, where the monoplane landed at 4.30 p.m. At 5 a.m. the next day, August 9, they left for the final stage to Croydon where a perfect landing was made at 5.30 p.m., after 12½ hrs. of non-stop flying over a distance of 1,400 miles.

Thus the complete flight of nearly 10,000 miles was flown under eight days.

There was a large crowd to welcome them at Croydon. A message was received earlier stating that the monoplane had been sighted at Lympne at 5 p.m., so that its landing at the London Air Port within 30 mins. revealed an excellent final spurt in spite of the long hours it had already been flying that day.

The Duchess of Bedford described her important flight as a pleasant but uneventful trip, and was impressed with the comfort of such a journey in spite of the extreme heat encountered at various stages. Captain Barnard was also very satisfied, declaring that everything ran well. He also thought they had accomplished all they had set out to do. Captain Barnard broadcast a brief story of his flight, from Savoy Hill on Friday evening. It is interesting to recall the history of *The Spider*. It was formerly known under the alias of *Princess Xenia*. Captain MacIntosh and Col. J. Fitzmaurice used it in their abortive attempt to fly the Atlantic from Ireland some time ago, then the former, accom-

panied by Sqdr.-Ldr. "Bert" Hinkler, endeavoured to fly to India in it, only to make a forced landing in Poland after an eventful non-stop flight of 24 hrs. in continual fog. When the Duchess acquired it she had the "Jupiter" fitted.



Not exactly a Grecian nose, but it functioned splendidly. The Bristol "Jupiter" engine in the Duchess of Bedford's Fokker monoplane, which was not disturbed by 10,000 miles in eight days. ("FLIGHT" Photo.)



### Flying Career of the Duchess of Bedford

The Duchess of Bedford has been a private owner for at least two years. We had the pleasure of publishing in *FLIGHT*, October, 1927, her own modest story of her air experiences. There the Duchess described how her first longing for personal experience of flying was roused when aircraft and Zeppelins invaded her quiet corner of the Midlands during the war. But those who were closely concerned with her life did not immediately welcome this longing, and it was not until 1926 that her first flight was made. Imperial Airways paved the way then, and it resulted in a flight from Croydon

to Woburn Abbey, the Midland residence of the Duchess in a D.H. "Moth." Her next experience was a longer flight northwards, to her Scottish home, and then visions of air travel abroad were awakened which resulted in "Moth" tours to France, Spain and Italy, etc. Since that time the Duchess of Bedford has become a confirmed air traveller, and has expressed the fact that aerial travel opened out new possibilities for her of seeing the world when she thought that her travelling days were over.

During the flight to India the Duchess was able to relieve Captain Barnard at the controls.

## LIGHT PLANE CLUBS

*London Aeroplane Club*, Stag Lane, Edgware, Sec., H. E. Perrin, 3, Clifford Street, London, W.1.

*Bristol and Wessex Aeroplane Club*, Filton, Gloucester. Secretary, Major G. S. Cooper, The Aerodrome, Patchway, Glos.

*Cinque Ports Flying Club*, Lympne, Hythe. Hon. Secretary, R. Dallas Brett, 114, High Street, Hythe, Kent.

*Hampshire Aero Club*, Hamble, Southampton. Secretary, H. J. Harrington, Hamble, Southampton.

*Lancashire Aero Club*, Woodford, Lancs. Secretary, Mr. Atherton, Avro Aerodrome, Woodford.

*Liverpool and District Aero Club*, Hooton, Cheshire. Hon. Secretary, Capt. Ellis, Hooton Aerodrome.

*Midland Aero Club*, Castle Bromwich, Birmingham. Secretary, Maj. Gilbert Dennison, 22, Villa Road, Handsworth, Birmingham.

*Newcastle-on-Tyne Aero Club*, Cramlington, Northumberland. Secretary, John Bell, Cramlington Aerodrome, Northumberland.

*Norfolk and Norwich Aero Club*, Mousehold, Norwich. Secretary, G. McEwen, The Aerodrome, Mousehold, Norwich.

*Nottingham Aero Club*, Hucknall, Nottingham. Hon. Secretary, Cecil R. Sands, A.C.A., 30, Park Row, Nottingham.

*The Scottish Flying Club*, 101, St. Vincent Street, Glasgow. Secretary, George Baldwin, Moorpark Aerodrome, Renfrew.

*Southern Aero Club*, Shoreham, Sussex. Secretary, Miss N. B. Birkett, Shoreham Aerodrome, Sussex.

*Suffolk Aeroplane Club*, Ipswich. Secretary, Maj. P. L. Holmes, The Aerodrome, Hadleigh, Suffolk.

*Yorkshire Aeroplane Club*, Sherburn-in-Elmet, Yorks. Secretary, Lieut.-Col. Walker, The Aerodrome, Sherburn-in-Elmet.

### CINQUE PORTS FLYING CLUB, LTD.

(AUG. 10).—Pilot instructor: K. K. Brown. Ground Engineer: R. H. Wynne. Machines in commission: RI and PM. Dual instruction: Lieut.-Comdr. Gubbins, 45 mins.; Mr. King, 4 hrs. 30 mins.; Mr. Coates, 30 mins.; Mr. Lambert, 4 hrs. 30 mins.; Mr. Clifford, 1 hr. 30 mins.; Mr. Cooke, 45 mins.; Mr. Hyde, 2 hrs.; Mr. Hume, 1 hr. 30 mins.; Mr. Dorman, 2 hrs.; Mr. Milton, 2 hrs. 30 mins.; Mr. Calvert, 1 hr. 30 mins.; Mr. V. H. Smith, 1 hr.; Mr. T. Bowring, 30 mins.; Mr. J. Bowring, 30 mins. Total: 14 members, 24 hours.

Soloists under instruction: Mr. Cooke, 3 hrs. Lieut.-Comdr. Gubbins, 1 hr. 30 mins. Total, 4 hrs. 30 mins., 2 members.

"A" Pilots: Mr. Richardson, 1 hr. 30 mins.; Mr. R. Dallas Brett, 15 mins.; Mr. Ellis, 2 hrs. 15 mins.; Mr. Crammond, 45 mins. Total, 4 members, 4 hrs. 45 mins.

Tests: 12, 1 hr. 55 mins. Joyride: 1, 10 mins.

Special journey: Folkestone Grass Speedway, 30 mins. Weather practically stopped flying on Sunday of this week, but in spite of this the time is only just below record. Mr. Lisle Martin, of Shepherdswell, and Messrs. T. & J. Bowring, of Goudhurst, were new members who commenced instruction during the week, and we are glad to welcome back Messrs. V. H. Smith and Culvert, who have been absent from the club for some months.

On Thursday of this week Mr. J. A. R. Cooke, of Mayfield, Sussex, was successfully launched solo, and both he and Lieut.-Comdr. Gubbins, R.N., are now ready for their "A" licence tests as soon as weather permits. On Bank Holiday Mr. Brown gave an exhibition of aerobatics by request over the Kent Motor Club's Grass Speedway Meeting at Folkestone, and put up an excellent show, his flick rolls being particularly neat.

The annual general meeting of the club was held on Thursday, and the Hon. Secretary's report, which was adopted, showed that whereas at the last annual general meeting the club had one Moth aircraft and a small stock of spares, with a credit balance of some £500, the club now had a comprehensive stock of spares and tools and a credit balance of the sum of £250, and in addition a club room with bar and steward, office garden and lawn had been established at Lympne out of working profits. At the previous annual general meeting there were 28 flying members and three ground members, a total of 31; whereas on the August 2, 1929, there were 98 flying members in various categories and 15 ground members, a total of 113.

Upon the proposition of Maj. Krabbe, it was resolved that as a reward for their services in the past, the Hon. Treasurer and Hon. Secretary be granted flying facilities at reduced rates when the aircraft and pilot instructor were not required by any other member, and they were to be hon. members of the club while they held office. Maj. Krabbe was elected Chairman of the club for the ensuing year, Mr. R. Dallas Brett and Mr. H. E. Twaites were re-elected Hon. Secretary and Hon. Treasurer respectively, and the new committee is as follows: Mr. A. Dallas Brett, of Folkestone, Mr. T. A. M. S. Lewis, of Postling, Mr. K. Edgson Wright of Ashford, Mr. W. H. Evernden, of Faversham, Capt. G. E. Took, of Dover, and Mr. A. J. Drake, of Hythe.

### LANCASHIRE AERO CLUB

WEEK TO AUGUST 3.—Flying time, 14 hrs. 10 mins. Instruction (10), 6 hrs. 40 mins.; Solo flights (14), 5 hrs. 25 mins.; Passenger flights (5), 1 hr. 5 mins. Tests (7), 1 hr.

Instruction (with Mr. Hall): Messrs. Lister, Braid, Davies, Brocklehurst, Faulkner, Ashworth, J. H., Russell, W., Kay, Greg, Dane.

Machines in commission, MQ, XD.

Soloist (under instruction): Dane (1st solo). Pilots: Messrs. Goodfellow, Meads, Hall, R. F., Davies, R. G., Michelson, Mills, Maxwell, Twemlow, Kay, Greg, Gattrell, Lister.

Passengers (with Mr. Goodfellow), Oddy; (with Mr. Hall, R. F.) Clayton, Braid; (with Mr. Davies, R. G.) Williamson, Miss Russell. New members: Brocklehurst, Russell, W.

WEEK TO AUGUST 8.—Flying time, 26 hrs. 5 mins. Instruction (10), 4 hrs. 45 mins.; Solo flights (18), 18 hrs.; Passenger flights (4), 1 hr. 5 mins. Tests (13), 2 hrs. 15 mins.

Instruction (with Mr. Hall): Messrs. Kay, Shaw, Brocklehurst, Russell, W., Whitehouse, Maxwell, Barlow, Dane, Ashworth, J. H., Lister.

Machines in commission, MQ, XD, EC.

Soloist (under instruction): Mr. Dane. Pilots: Messrs. Davies, Meads, Nelson, D., Kay, Greg, Gort, Gerrard, Gattrell, Maxwell, Twemlow, Barlow, Hall, R. F., Hall, Lister, Mills.

Passengers (with Mr. Hall), Mr. Booth; (with Mr. Elwell), Mr. Dawson; (with Mr. Meads), Miss Johnson; (with Mr. Gattrell), Mr. Barratt.

Six members of the club took part in the Manchester-Liverpool inter-city Air Race on the 10th inst., three other members assisted at the Northern Air Lines Pageant by giving a display of formation flying.

### NEWCASTLE-UPON-TYNE AERO CLUB

Instructor: G. M. S. Kemp. Engineer: W. Dunning. Assistant: J. Tait. Aircraft: (3), PT, LX, QV.

(AUGUST 11).—Flying time, 50 hrs. 45 mins. Instruction, 27 hrs. 5 mins. "A" pilots, 12 hrs. 45 mins. Solo training, 3 hrs. Passengers, 6 hrs. 55 mins. Tests, 1 hr.

August Bank Holiday Monday was a day set apart for those people who had never tasted the delights of the air. The weather was none too kind, a high wind continuing to blow most of the time. Nevertheless, Old Sol deemed it advisable to beam upon us and we enjoyed it after the bad weather we had been experiencing. Early on Monday one of the machines decided to have a rest and left us with only one machine on service. We soon had the fault rectified and in a very short time two machines were in the air. Thursday was also disappointing, when we were left with one machine again. Let us sincerely hope that next week will make up for all the lost time.

Mr. Hutchinson, one of our recent members, completed his tests for his "A" licence last week.

The club magazine came out on Saturday and everywhere one could see nothing else but people with a magazine with a very attractive front. This was contributed to by one or two well-known firms inserting advertisements. Great credit is due to the editors who have given us such a splendid number this time.

Let us hope that the next issue will be better still.

### SINGAPORE FLYING CLUB

(WEEK JUNE 30-JULY 6).—Total flying time, 11 hrs. 55 mins. Dual instructions, 6 hrs. 25 mins. Solo flights, 4 hrs. 25 mins. Passenger flights, 5 mins. Tests, 1 hr.

Flying was possible only on Sunday and Monday, rough weather interfering with our activities during the remainder of the week.

The flying time for the first six months of this year amounts to 278 hrs. and 45 mins., making a total of 545 hrs. and 17 mins. since the formation of the club.

(WEEK JULY 7-13).—Total flying time, 10 hrs. 25 mins. Dual instructions, 5 hrs. Solo flights, 2 hrs. 35 mins. Passenger flights, 2 hrs. 25 mins. Tests, 25 mins.

Again this week we have been handicapped by inclement weather, the above time having been put in solely on Sunday and Saturday afternoon, no flying having been possible in the evenings during the week. On July 7, C. V. Middleton passed his altitude test for "A" licence.

### FROM THE FLYING SCHOOLS

#### Brooklands School of Flying, Brooklands Aerodrome

(AUGUST 11).—School machines, 71 hrs. Privates owners under instruction, 49 hrs. 700 passengers carried.

A brilliant week of flying in every way, both instruction and joy riding.

We congratulate Mr. R. Ruutz Rees on getting his "A" licence after seven flying days—quite a good record.

We also congratulate Mr. G. D. Shellabeare on doing his "A" licence height test in good style, reaching the height of 7,500 ft. in 12 mins. on his Gipsy Moth.

People are still rolling in, in large numbers.

The following new pupils have joined: Messrs. Chichester, Clayton-Daubenny, Bullard.

Mr. Ruutz-Rees is going through for his "B" licence.

#### The Phillips and Powis School of Flying

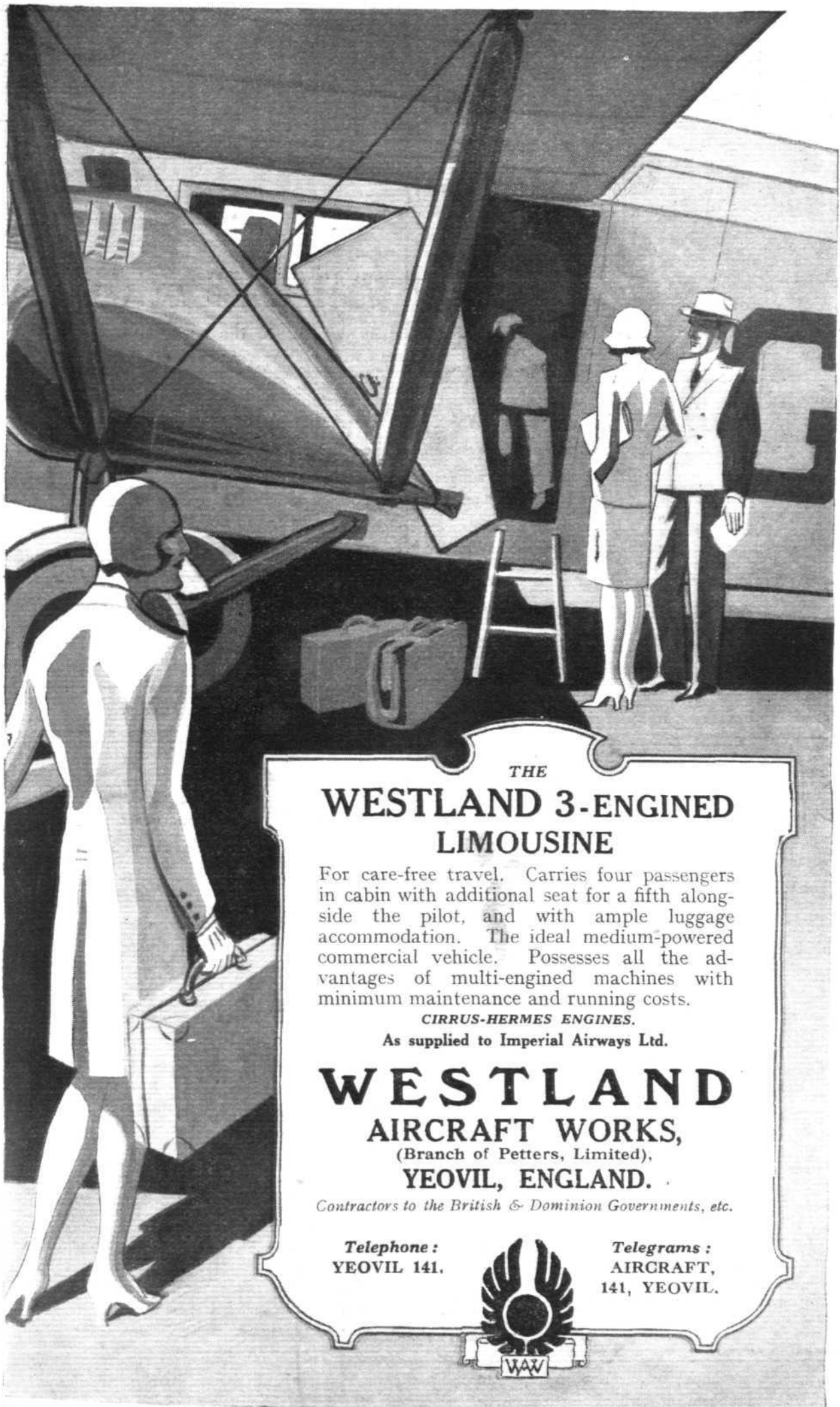
(WEEK AUGUST 8).—Flying time, 21 hrs. 40 mins. Instructors: Flying Officer R. T. Shepherd, Mr. H. B. G. Michelmore.

We have taken delivery of our second Gipsy Moth to help cope with the increasing number of pupils. August promises to be a most successful month for the school.

The average amount of dual instruction given to our last three soloists, namely, Messrs. Lyle, Milne and Parsons, works out at 5 hrs. 25 mins. Mr. Lyle actually made a very successful first solo after only 4 hrs. dual instruction. This is particularly gratifying, especially when it is recalled that the school has not had an aircraft damaged in any respect by soloists. We put the good results down to the up-to-date methods employed and the large aerodrome.

Captain I. T. P. Hughes and Messrs. Reyne, Yendall and Percy have this week joined the school. Flight-Lieut. C. F. Sealy has joined to keep his hand in during his leave from Egypt.





The illustration depicts a large, multi-engine aircraft, identified as a Westland 3-engine limousine. The aircraft is shown from a side-on perspective, with its cabin door open. A man in a white uniform, likely a steward or pilot, is standing in the foreground, holding a suitcase. Two women, dressed in 1920s-style clothing (hats, coats, and dresses), are standing near the aircraft's entrance, looking towards the plane. A suitcase is also visible on the ground near the entrance. The aircraft has a high-wing configuration and a large fuselage. The background is a simple, dark, stylized representation of a sky or hangar.

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## GUGGENHEIM AIRCRAFT COMPETITION

HARRY F. GUGGENHEIM, President of The Daniel Guggenheim Fund for the Promotion of Aeronautics, announces the acceptance of six new American entries in the International Safe Aircraft Competition. At the same time two British entries, Vickers, Ltd., and the De Havilland Aircraft Co., Ltd., have been forced to withdraw on account of the extreme pressure of work in connection with British Government requirements. The total number of entries in the competition is now 16. The new entries, all of whom are American manufacturers, are as follows:—

**The Cosmic Aircraft Corporation**, Bridgeport, Connecticut, submitting a sesqui-type cabin 'plane, incorporating a special type of slot and flap in combination; Warner engine.

**Cunningham-Hall Aircraft Corporation**, Rochester, New York, submitting a two-place, low-wing, semi-cantilever, monoplane; high lift wing with special flaps and special control; Genet engine. This company was organised late in 1928, bringing into the industry a 90-year-old company, James Cunningham, Son & Co. It plans to produce six-place cabin, all-metal and four-place cabin 'planes.

**Dare Airplane Co.**, Detroit, Michigan, submitting an all-metal, two-place, low-wing monoplane; Dare variable camber wings capable of varying the camber in flight; Warner engine.

**Fleet Aircraft Inc.**, of Buffalo, New York, submitting Fleet Model 2 biplane, specially streamlined and with a newly-

designed flap gear on the wing; Kinner engine. This company is a subsidiary of the parent organisation, The Consolidated Aircraft Corporation of Buffalo, best known for its training planes, widely used by the military and commercial service.

**Pitcairn-Cierva Autogiro Co. of America**, Bryn Athyn, Pennsylvania, an American-built autogiro with such modifications as the Pitcairn Company may find desirable to install to improve the qualities of the 'plane; Wright J-6 engine. This company is a subsidiary of Pitcairn Aircraft, Inc., which manufactures five types of 'planes widely used in air mail services.

**Rocheville Aircraft Corporation**, Los Angeles, California, submitting an externally-braced, parasol-type monoplane, with variable camber and variable thickness wing; Hallett engine.

Of the 16 entries in the competition to date, 12 are from the United States, 3 from Great Britain, and 1 from Italy. The manufacturers remaining in the competition previous to this announcement are as follows:—

From the United States: Curtiss Aeroplane and Motor Company, Schroeder-Wentworth Associates, Charles Ward Hall, Inc., Heracio Alfaro, J. S. McDonnell, Jr. and Associates, and the Brunner-Winkle Aircraft Corporation.

From Great Britain: Handley-Page, The Gloster Aircraft Co., Ltd., and Cierva Autogiro.

From Italy: The Societa Italiana Ernesto Breda of Milan.



### International Air Rally

An International Air Rally is being organised by the Suffolk and Eastern Counties Aeroplane Club at Hadleigh Aerodrome, Suffolk, in conjunction with a two-days' air display to be held on August 31 and September 1. The rally is open to any type of aircraft of any nationality. Zero hour will be noon on August 31. The winner will be the pilot who, having crossed the finishing line, viz., a white line on the aerodrome, from south to north, obtains the highest number of marks on the following formula:—

$$\frac{D \times \frac{D}{50}}{M}$$

Where D=Distance in miles from stated point of departure, and M= Minutes+ or - Zero.

Any competitor who is observed to be deliberately wasting time in the air will be disqualified. The first prize will be £25, second £10, third £5. During the two days of the display there will be a bomb-dropping and a landing competition open to all pilots who have competed in the Rally. In each event the prizes will be: first £3, second £2.

During the Display pilots and passengers will be the guests of the club. Intending competitors are requested to write for entry forms to The Display Secretary, The Aerodrome, Hadleigh, Suffolk. Entries close on August 27.

### Clacton Air Display

The Brooklands School of Flying, of Brooklands, Surrey, are holding a special display of flying at Alton Park Road Flying Ground, Clacton-on-Sea, on Wednesday, August 28. The meeting will be opened by Mr. J. E. Ball, J.P., Chairman of the Clacton Council, at 11 a.m., and besides the usual joy rides from 5s. with Capt. E. A. Jones, which are now available daily at Clacton, a varied programme is being arranged consisting of displays of aerobatics by well-known pilots, bombing cars, and, it is hoped, a parachute descent.

### Bristol Aerial Garden Party

The Bristol and Wessex Aeroplane Club, Ltd., will hold an Aerial Garden Party on Sunday, September 22, as a farewell display before moving to the new Bristol Aerodrome.

It is hoped to arrange for visits by a number of interesting new machines, and a competition will also be incorporated in the programme. Details will be notified later.

### A Devon Air Rally

An Aerial Rally and Demonstration of light planes are planned by the Agra Engineering Co., Ltd., for September 21, at Haldon, Teignmouth.

### A "Genet" Record

CABLES from America announce that an Armstrong Siddeley Genet engined Beazley machine broke the world's altitude record for aircraft weighing less than 880 lbs., by climbing 25,000 ft. The previous record was 22,250 ft., made in Germany and 19,862 ft. made in England.

### Liverpool versus Manchester

On August 10, Liverpool and Manchester engaged in an air race from Manchester to Hooton, the headquarters of the Liverpool Aero Club on the Cheshire side of the Mersey, and back. The event was the outcome of a challenge by Manchester, and three aeroplanes from each club took part under excellent conditions. The round journey was 70 miles, and the Liverpool team won, thus securing the trophy presented by Sir William Cunliffe.

The competitors were as follows:—A. Moulds, Liverpool, Miss W. Brown, Manchester, J. Allen, Liverpool, E. Cohen, Manchester, J. C. Cantrell, Manchester, and T. H. Naylor, Liverpool (scratch).

Each pilot carried a passenger. Manchester with a more experienced team of pilots started as favourites, but Liverpool took the lead on the first lap, when Mr. Allen crossed the line a minute in front of Mr. Moulds, who flashed past Miss Brown a minute later. Mr. Naylor and Mr. Cantrell made a fight of it, and again the Liverpool competitor won. Mr. Cohen, the last to finish, was three minutes behind the machine in front of him. There was an hour's rest at Hooton, and then the machines started back to Manchester, the race being won by Mr. Naylor (Gipsy-Moth), whose speed was 98.53 miles an hour. Mr. Cantrell, on a Gipsy-Avian was second, less than a length of the aerodrome at Wythenshawe behind Mr. Naylor, and Mr. Allen, who was third, was only a few yards behind Mr. Cantrell. Mr. Moulds was fourth, Miss Brown fifth, and Mr. Cohen last.

Sir James Reynolds gave a prize for the team which had the best collective flying record during the race, and this also went to Liverpool.

During the afternoon there were flying exhibitions at both aerodromes by members of the Lancashire Aero Club and R.A.F. pilots.

### Newcastle Air Pageant

ONE of the most important air pageants of the year will be held on October 5, at Cramlington aerodrome, Newcastle. It will be arranged by the Newcastle Aero Club, and will have the support of the Royal Air Force. According to present arrangements, there will be three National events; a competition for the Grosvenor Cup, another for the Air League Trophy, and yet another for a trophy presented by the British Aircraft Manufacturers. Other light aeroplane clubs will support the pageant.

### A.A. Plans for Ulster

IN connection with the T.T. Race in Ulster on August 17, the Automobile Association announce that special arrangements have been made for the convenience of their members who wish to fly to Belfast. Full information about the aerodromes, refuelling points, etc., can be obtained on application to the Aviation Department, The Automobile Association, Fanum House, New Coventry Street, London, W.1.



## EDDIES

**F**LIGHT has no politics outside the politics of aviation. Therefore, can be welcomed and applauded whole-heartedly the persistence of the Prime Minister, Mr. Ramsay MacDonald, in spite of the petty and unseemly attacks made upon him in Parliament (presumably as a peg upon which to hang political bias) for travelling by air upon a military machine, thus getting rapidly from point to point. That the head of the British Government should think it laudable to cultivate this means of eliminating waste of time in getting about, so that he may be where he is needed in looking after the country's affairs, should surely be one for congratulation and applause rather than one to appraise at the value of petrol and wear and tear of the machines.

**A**FTER all, our pilots have to fly, and fly continually, in the upholding of their training. If not in one capacity then in another. Better surely, that they should be doing practical work and gaining experience at the same time, instead of merely flying around, figuratively

**A**ERIAL "Gate crashers" appear to be now quite a possibility, judging by the following item which appeared the other day in the *Daily Telegraph* :—

"Flying down to Cheltenham during the past week-end, Mr. Nigel Norman, one of the directors of the new flying club at Heston, and a friend were surprised, as they passed over the Cottesmore country, to see a number of 'planes collected on the ground.

"They decided to investigate, so landed their machine, and, without stopping the engine, walked over to a group of people who were standing near one of the machines. They were immediately asked their names and what brought them there, and were informed that this was a private party. They naturally apologised for an unintentional intrusion, and at once resumed their journey.

"The incident, however, serves to illustrate the rapid growth of owner-piloting—for these week-end flying parties are beginning to assume a definite place in the social life of the country—and also suggests that the aerial gate-crasher may be an innocent offender against social etiquette."

## "Aero Idioms"

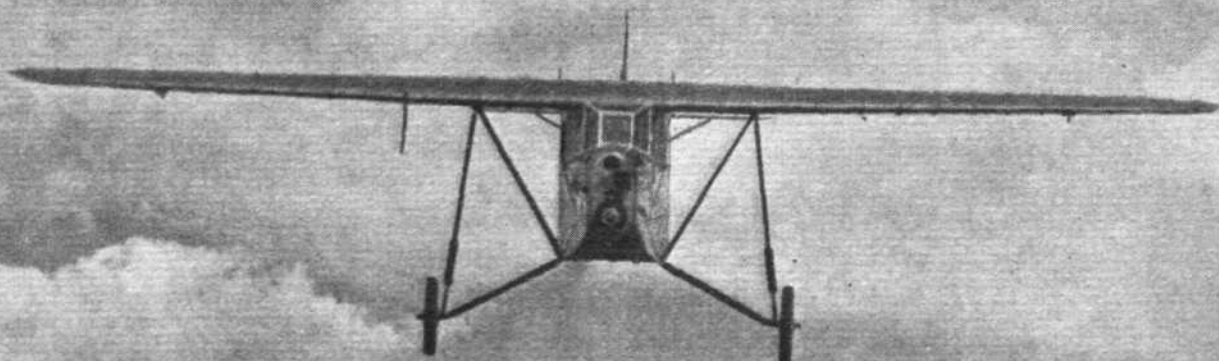


speaking, purposelessly. More praise to Ramsay MacDonald's efforts, therefore, and may he, in flying here, there and everywhere during his term of office, set such an example, following the lead of H.R.H. the Prince of Wales, as will impress the whole nation and set them thinking in such terms of air-mindedness as will lead to Britain achieving her world's place in the air, like unto that which she has, for centuries, held upon the water.

**L**ET the yapping dogs who would degrade political life even a bit more than it has already reached, take heed of the air-mindedness lesson offered them by the Prime Minister and emulate the example of moderation in speech as displayed by such thinking men as Mr. Stanley Baldwin and Sir Samuel Hoare, instead of the political mud-throwing which appears to be so fashionable. It is with the keenest satisfaction that we received the information that Mr. MacDonald not only intended to fly in an R.A.F. machine from Northolt aerodrome to Lossiemouth, although, at the last minute circumstances were against him, but that for preference he would *always*, when feasible, travel by air. It is to be hoped the Air Ministry and the Parliamentary Under-Secretary for Air will maintain their helpful co-operation to this end, and refuse to be intimidated by a handful of "Outs" instead of "Ins."

**I**T sets one wondering as to details when one reads in a message from New York that flying fire engines stationed on the tops of skyscrapers will soon be a reality. More especially when this statement is attributed to Mr. John Kenlon, the Chief of the New York Fire Department. The plans for an aerial engine, so he says, have already gone beyond the talking stage. The only thing preventing actual experiments is the lack of a practical helicopter type of 'plane, which could hover around the upper storeys of tall buildings while fighting a blaze. Instead of water, the winged fire-engine will use a chemical substance which it will pump through the windows of a burning building with compressed air. The flying fire engine, Mr. Kenlon declares, is essential to the safety of American cities, with their towering structures. I fancy, however, we shall still have to wait awhile for developments.

**F**OR several years now we have had our flying doctor in England. With far greater scope, however, medical help has been successfully instituted by air in Australia, with apparently the most beneficial results. The inaugurator of this departure is Dr. Welch, who has carried out his medical visits by aeroplane to remote parts of Australia under the auspices of the Australian Inland Mission of the Presbyterian Church. His winter experience was good,



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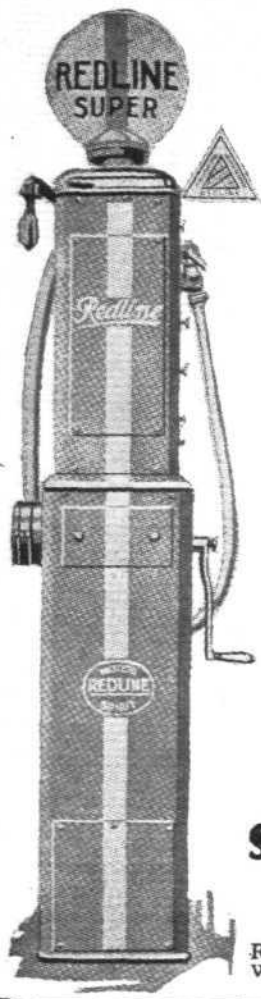
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but the excessive summer heat he found very trying. In giving details of the work, the *Daily Telegraph* Sydney correspondent states that on one trip a clinical thermometer registered 105 deg., and only that because it was unable to go higher. Other thermometers showed 108 deg., but it was not unusual for 115 deg. and even 120 deg. to be registered on summer days.

On one medical trip westward of the Cloncurry headquarters he flew 330 miles to Davenport station, where a woman was ill. The pilot was unacquainted with the district, but the place was found by the aid of the smoke from a fire. The woman was carried for five miles to an improvised landing ground, and then placed in the aeroplane on a stretcher and taken a distance of 130 miles to Boulia Hospital, a three hours' journey.

ON a visit to Cape York Peninsula, Dr. Welch first flew 120 miles to Normanton and thence to the district where his services were required. Tropical rain compelled the aeroplane to fly only 100 ft. from the ground. The patient was brought to him on a stretcher, and he applied the necessary treatment.

In the course of a year Dr. Welch flew 20,000 miles.

SIR CHARLES ROSE, President of the Royal Geographical Society, at their annual meeting, bore testimony to the immense and increasing value of surveying by air, for geographical purposes.

"We may say," said Sir Charles, "that air surveys have demonstrated their indispensability for certain purposes and

#### Nottingham Model Club Suggestion

AN effort is being made to form a model aero club in Nottingham, and those who are interested in models or full size gliders should write to Mr. F. A. Lowe, care of "Araby," Bramcote Road, Beeston, Nottingham.

#### Service!

A GIPSY-MOTH owner landed near Sevenoaks with plug trouble. He walked half a mile to telephone to the Brooklands School of Flying for a new plug, walked back and found the new plug already in!

#### Civilian Coupé Tested

THE Civilian Aircraft Co.'s "Civilian" Coupé was successfully flown on Sunday morning by Mr. Sutcliffe of the Midland Aero Club. He took the machine off at half throttle and flew for about 10 minutes. The cockpit is entirely free from draught and vibration, and the machine flew comfortably, hands and feet off.

Further tests are being made during this week.

under certain conditions. All are agreed that the surveys of deltas, estuaries, and swamps are now greatly facilitated by the new method. All are agreed that air surveys are rendering remarkable service to archaeology, and that they are, in many cases, a necessary adjunct to that science.

"WE have had a brilliant example of the value of air photography in the exploration of the great rivers and forests of South America," he continued, "and it is probable that important work may be done from the air in the field of Polar exploration. In more humdrum work, the surveys of towns, especially Eastern and African towns, on flat sites, may be expeditiously and cheaply carried out by the aid of this method.

"For the rest, we cannot yet predict the place that it will eventually occupy in the systematic mapping of this world's surface. But we know that in a very few years much has been accomplished, and we may expect that in the future, photography from the air will have an important influence on the technique of exploration and surveying, and, in all probability, on that of cartography also."

SIR CHARLES next referred to the balloon expeditions to the Polar regions, and said that the future appeared to lie with the heavier-than-air craft—seaplanes.

"Perhaps the first to draw attention to the archaeological value of reconnaissance and photography from the air," he added, "was Lieut.-Colonel G. A. Beazeley who, during the war, observed clearly the lay-out of ancient cities in Irak, the traces of which were quite unintelligible on the ground."

#### An Aerodrome for Clacton?

THE Clacton Urban District Council have received an offer of a field for an aerodrome from the Jay Wick Sands Estate. In the communication to the Council it is pointed out the value of the town having an aerodrome, with possible air services to Croydon and other places, which might pay for themselves by conveying light market garden produce and other goods. The ground is offered free of cost, so that the only charge upon the Council would be for the erection of hangars and the purchase of aircraft. The matter is being considered by the Council.

#### Prime Minister's Flights

MR. RAMSAY MACDONALD, the Prime Minister, has become a confirmed air traveller to cover his numerous important engagements in many parts of the country. In order to use his personal influence in the distressing Lancashire cotton dispute, he flew down from Lossiemouth to Turnhouse Aerodrome, Edinburgh, on August 10, and after a conference with various officials, he flew back again.



A VISITOR FROM THE NEAR EAST: His Excellency Sheikh Hafidh Wahba—a Delegate from Hejas to the recent Postal Congress—visited the Works of Petters, Ltd., Yeovil. The Westland IV, in which he took a flight, is shown in the background. Left to right, Mr. E. M. Benjamin, Capt. Paget, Mr. P. W. Petter (Managing Director of Petters, Ltd.), His Excellency Sheikh Hafidh Wahba, Mr. Ali Shukry Bey, Mr. T. D. Cree, Capt. R. C. Petter, Capt. Hill, Mr. R. J. Norton.

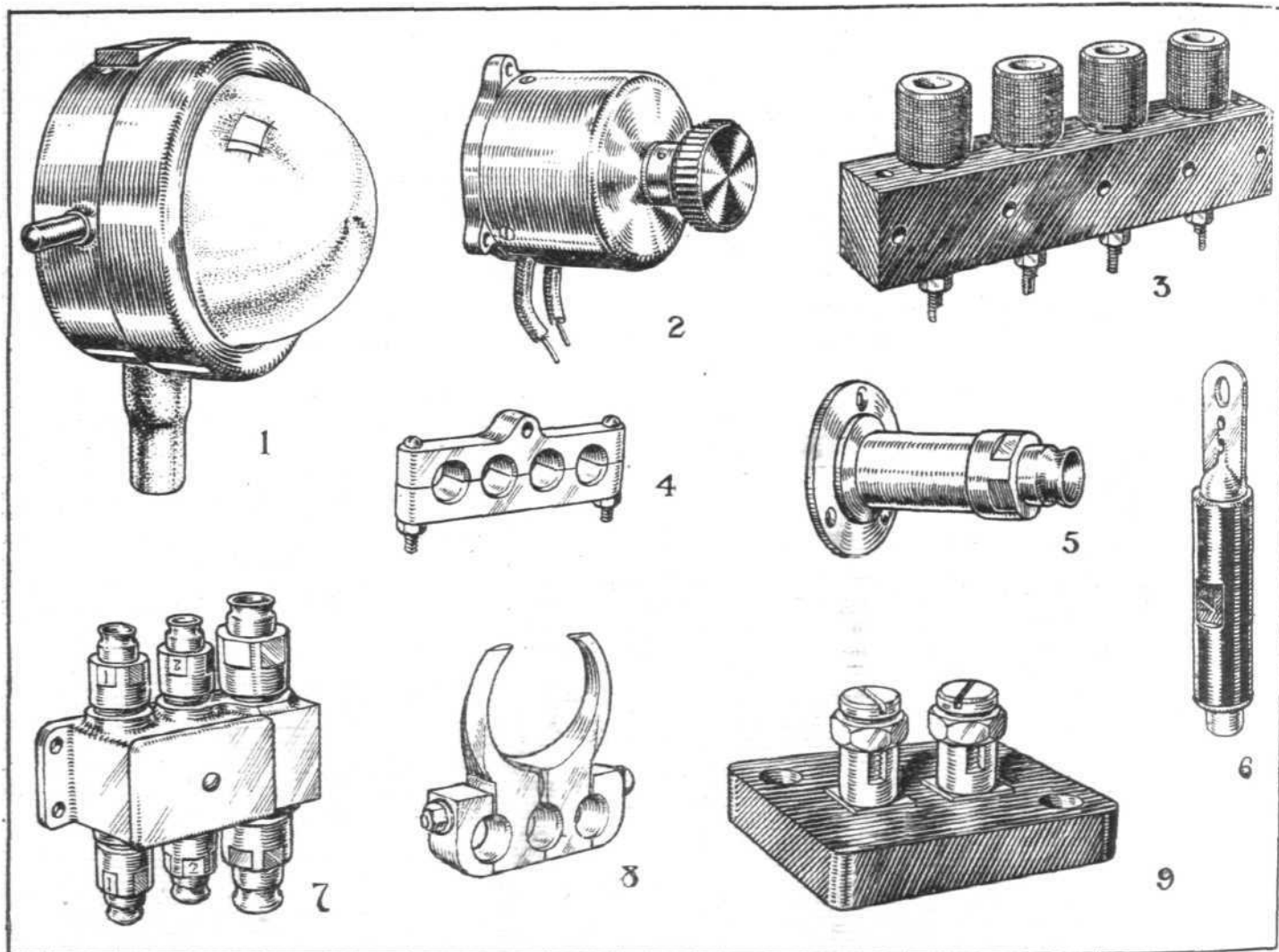
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even the smallest parts, whereby Bonded Stocks or Specification Material are nearly always available at short notice. This is a bold policy on their part, because even the smallest parts for aircraft, manufactured under Air Ministry contracts, are more rapidly subject to modification than anything on earth, but then rush orders do arise in the industry, and the policy of Bonnella's is therefore very much to the advantage of aircraft manufacturers in cases of emergency.

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It is the policy of the company to produce all parts of the components themselves from the very raw material as far as possible, for they have found that accuracy and delicacy of aircraft work are more assured by this policy. And when they are responsible for the entire manufacture they can more easily trace the origin of any faults that may arise.

During a recent visit to their growing works at 46-48, Osnauburgh Street, N.W.1, one observed their system, covering

with a certificate of release note.

They are on the Air Ministry list of approved firms, and without exception they purchase raw materials from those manufacturers who are also approved, by which they ensure the reliability of the material. They have also been on the King's Roll since its inception. The welfare of their workers is also much the concern of the company.

A few important components produced by them are:—High-tension connection and brush holder for distributor, and C.A.V. magneto adapter, etc., for aero engines; various sockets and plugs, cockpit lamps, telephone plugs and insulators, etc., for lighting and wireless equipment; two-way cock and gas coupling for gas starter system, and piston position indicator for Napier engines. A great variety of Cable bonding parts and earth fittings are also produced.

### Shipping and Air Mails

ONCE again the French liner *Ile de France* will experiment with air mail upon approaching the coast in the course of its voyages over the Atlantic. The aircraft will be catapulted from the ship to allow mail to be delivered 24 hours earlier.

### Canadian Air Mail

An average of about 1,400 letters a day is being carried over the newly-established air mail service between Montreal and Windsor, according to the Post Office Department, while about half that number is carried daily between Toronto and Buffalo.

# "The DISCOVERY" TAKES A MOTH WITH HER



The famous barque, "The Discovery," which has recently set out on a voyage to the Antarctic under the leadership of Sir Douglas Mawson, F.R.S., B.E., carries with her a Gipsy Moth Seaplane. The Machine will be used for observation and photographic work, and a quickly interchangeable ski undercarriage forms part of its equipment for operation on snow. There is a wireless receiving set installed in the Moth so that her crew may be called from "The Discovery" when she is out. Her selection for operation over some of the most hazardous territory in the world is yet another instance of the utter confidence inspired by the Gipsy Moth.



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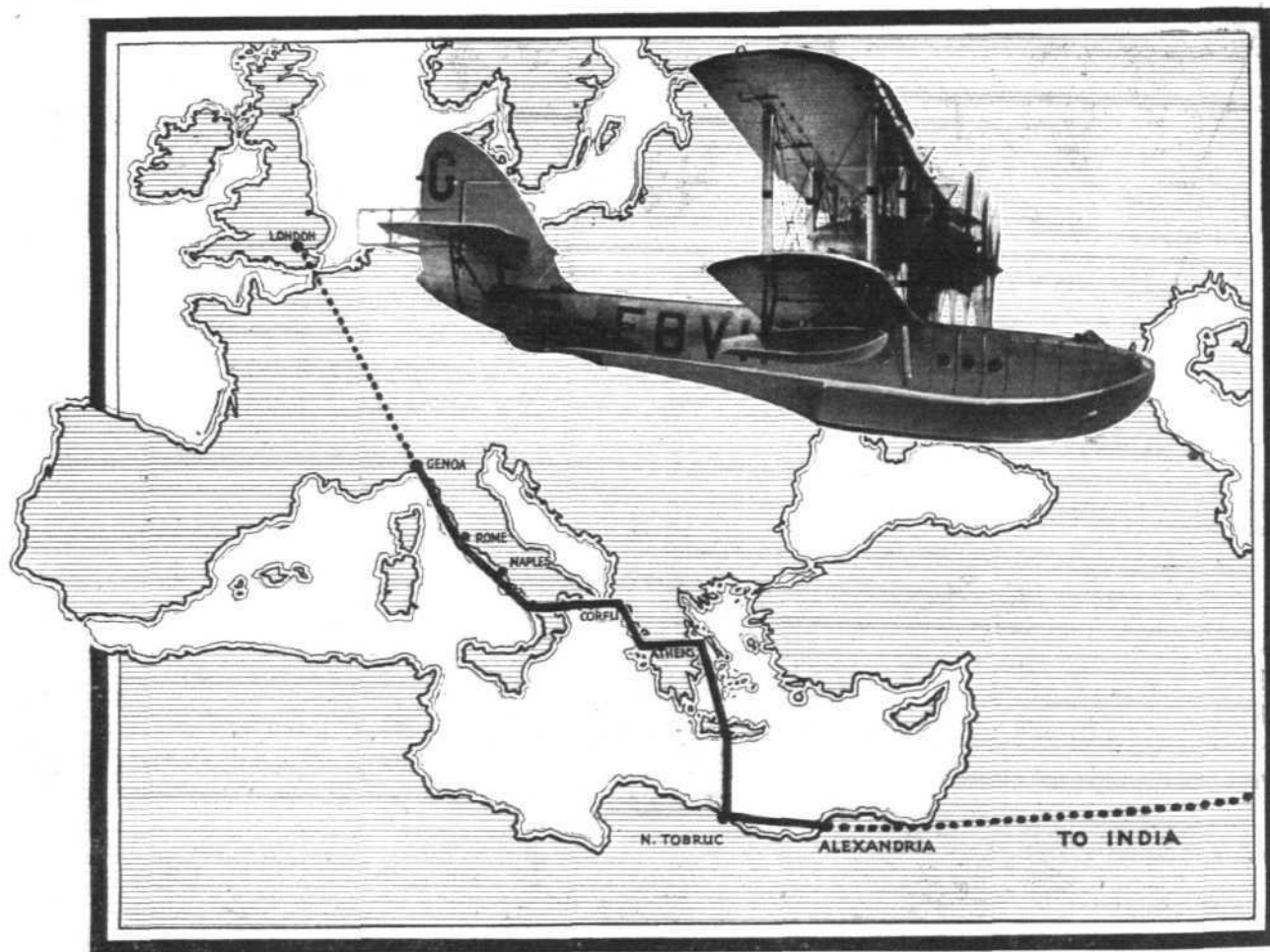
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# THE ROYAL AIR FORCE

London Gazette, August 6, 1929.

## General Duties Branch

Sqdn.-Ldr. J. Everidge, M.C., is placed on retired list (August 5). Lieut. J. D. Ainger, R.N., Flying Officer, R.A.F., relinquishes his temp. commn. on return to Naval duty (September 7, 1928). (Substituted for *Gazette*, September 11, 1928.)

## Memorandum

The permission granted to R. Watson to retain honorary rank of Second-Lieut. is withdrawn on his conviction by the Civil Power (June 26).

## RESERVE OF AIR FORCE OFFICERS

### General Duties Branch

The follg. are granted commns. in Class A.A. (ii) as Pilot Officers on probation:—D. S. Clarke (July 17); C. Bland (July 18); F. H. Peers (July 22); G. U. Hayns (July 24). W. A. W. Fitzsimons is granted a commn. in Special Reserve as a Pilot Officer on probation (July 1). The follg. Pilot Officers on

probation are confirmed in rank:—W. H. Bigg (July 22); C. H. Carter, A. F. Fleetwood-Lawton (July 30); H. C. Osborne (July 31).

The follg. Flying Officers are promoted to rank of Flight Lieut. (August 6):—A. J. P. Hytch, W. A. Mackay, D.C.M., B. R. Millar, H. D. Davis, A.F.C., G. M. Cox, M.C. Pilot Officer M. E. Morris, of the Special Reserve, is promoted to rank of Flying Officer (May 14); Pilot Officer B. N. H. Thornely is transferred from Class A.A. (ii) to Class C. (August 3); Flying Officer L. G. A. Kirchner is transferred from Class C to Class A (July 17).

The commns. of the follg. Pilot Officers on probation are terminated on cessation of duty:—W. G. Eatherley (June 7); E. S. Kennedy (July 17).

## AUXILIARY AIR FORCE

### General Duties Branch

No. 600 CITY OF LONDON (BOMBER) SQUADRON. The following to be Pilot Officer:—G. W. Bennett (June 5).

No. 601 COUNTY OF LONDON (BOMBER) SQUADRON. The follg. to be Pilot Officer:—The Hon. George R. Ward (June 27).

## ROYAL AIR FORCE INTELLIGENCE

**Appointments.**—The following appointments in the Royal Air Force are notified:—

### General Duties Branch

**Wing Commanders:** J. T. Babington, D.S.O., to R.A.F. Depot, Uxbridge, 6.8.29. A. ap Ellis, C.B.E., to Air Ministry (C.A.S.), 27.7.29. A. C. Winter, O.B.E., to R.A.F. Depot, Uxbridge, 27.7.29.

**Flight Lieutenants:** B. K. D. Robertson, A.F.C., to H.Q., Coastal Area, 1.8.29. G. D. Daly, D.F.C., to No. 1 School of Tech. Training (Apprentices), Halton, 29.7.29. A. J. Warwick, to H.Q., Wessex Bombing Area, Andover, 1.8.29. H. A. Hamersley, M.C., to R.A.F. Base, Calshot, 1.8.29. F. G. Gibbons, D.F.C., to No. 5 Flying Training School, Sealand, 1.8.29. R. A. B. Stone, to No. 1 Air Defence Group, 1.8.29. N. Carter, to Station H.Q.,

Donibristle, 1.8.29. G. J. Southam, to School of Technical Training (Men), Manston, 1.8.29. W. A. Tattersall, to No. 21 Group H.Q., West Drayton, 1.8.29. A. E. Paish, to No. 2 Flying Training School, Digby, 1.8.29. E. W. Broadberry, M.C., to Home Aircraft Depot, Henlow, 1.8.29. E. C. Dearth, to Home Aircraft Depot, Henlow, 1.8.29.

**Flying Officers:** G. D. Green, to Marine Aircraft Experimental Estab., Felixstowe, 1.8.29. H. M. G. Parker, to Aeroplane and Armament Experimental Estab., Martlesham Heath, 1.8.29. J. H. McC. Reynolds, to Marine Aircraft Experimental Estab., Felixstowe, 1.8.29. D. V. Ivins and W. G. Cheshire, to Home Aircraft Depot, Henlow, 8.6.29. C. H. Tighe, P. S. Bloskey, H. E. Nowell, G. R. Beamish, L. W. Cannon, T. H. Carr, R. Costa and G. H. Shaw, all to Home Aircraft Depot, Henlow, 1.8.29.



## Anglo-French Aviation Conference

LORD THOMSON, the Secretary of State for Air, arrived at Le Bourget with M. Laurent-Eynac, the French Air Minister, on August 7, to spend three or four days in Paris. His visit was purely private, and there was no question of continuing the conversations which they were engaged in earlier in the day. Those conversations laid the foundation for wide collaboration between France and Great Britain. The British Air Ministry issued the following statement after the Conference:—The French Air Minister and the Secretary of State for Air met at the Air Ministry and discussed various questions affecting French and British commercial aviation. The discussions resulted in agreement both in principle and on certain details for the development of air transport in Africa, Middle East and Far East, and in South America, based on wide mutual co-operation between the two countries.

## A Specialist's Air Service

In order to save time in reaching urgent cases, two eminent radiologists have made arrangements to travel by air whenever necessary. They will use a special X-ray apparatus container in two bags no longer than attache cases. One of the radiologists served in the Royal Air Force during the war, and now holds an appointment in an Auxiliary Squadron.

## Echo of the "Italia" Disaster

THE Italian Government has decided to confer a gold medal and a yearly pension of 2,000 Swedish kroner on Mrs. Anna Malmgren, the mother of Dr. Finn Malmgren, the Swedish explorer, who last year lost his life during General Nobile's Polar expedition. After the disaster to the *Italia*, Dr. Malmgren and two Italians set out on foot for Spitzbergen. He succumbed and died alone, having prevailed on his companions to go on without him.

## The "Southern Cross" Plans

THE crew of the *Southern Cross* monoplane, who flew from Australia to England in record time recently, were the guests at a reception held at the British Empire Club on August 7. They were received by Air Vice-Marshal Sir Sefton Branker. If time permits they may next attempt a South Atlantic crossing, then fly to North America and ship to Australia from San Francisco. Alternatively, a more direct flight to Australia will be made, probably along the route they came.

## International Air Transport

AMSTERDAM Congress resolutions:—Last month the International Chamber of Commerce, which has its headquarters at 38, Cours Albert 1er, Paris, held its fifth Congress in Amsterdam. Through its Air Transport Committee, the Chairman of which is M. Pierre Etienne Flandin, it has for some years made a feature of aeronautical air traffic questions.

Fifteen nationalities are represented upon this committee. The resolutions passed were first discussed at a group meeting on July 9. At that meeting M. Pierre Etienne Flandin explained the work of the International Chamber as regards aeronautical policy since the preceding Congress (1927). In particular he referred to the success obtained by the international Chamber when the postal administrations met at his express request in a special conference on September 1, 1927, to prepare new air mail regulations. He also insisted upon the necessity of unification of air law both public and private and recorded the fact that the resolutions already passed by the International Chamber of Commerce on the adhesion of as many countries as possible to the International Convention of 1919 had recently received satisfaction at the Extraordinary Conference in Paris (June, 1929), at which the contracting States and various States which had not adhered to the Convention of 1919 met. Mr. Flandin then dwelt upon resolutions concerning the creation of free air ports, the introduction of through air and rail traffic and on the various barriers to air traffic.

## To Golf by Air

MR. G. J. SCARAMANGA and his wife flew to the Prince's links, Sandwich, last Sunday evening for a week-end's golf. They landed in the Earl of Guilford's field adjoining the fourteenth green, and were greeted by Capt. H. Biard, secretary of the club, and players. The visit was also made to test the adaptability of the field for landings, and as this one was successful, the arrival of golfers by air in ever-increasing numbers at the championship courses between Deal and Sandwich is expected.

## Galway-London Air Experiment

As reported in previous issues, a special air mail will be carried from Galway to London on August 24. Colonel Charles Russell, formerly chief of the Irish Free State Air Force, will pilot a Vickers biplane fitted with a Rolls-Royce engine, which has been placed at his disposal by Sir Robert McClean of Vickers, Ltd., who will go to Galway to witness the start of the flight. Col. Russell will carry 160 lbs. of mail, which will have arrived in the North German Lloyd liner *Karlsruhe*, from New York, and expects to cover the distance in 4 hrs. There is a good aerodrome at Oranmore, about six miles from Galway city, and if it is found possible to save at least a day in the journey from New York to London by using aircraft, then a regular air service may be organised.

## Irish Scheme for Training Pilots

It is understood that the Irish Free State Government is considering a scheme for training civil pilots in the Free State Air Force. At present there are no civil aviation centres in Ireland. If this scheme matures it will probably have a connection with the proposed air service between Dublin and London, with links to Cork and Belfast.



### Parking for the Schneider Race

THE Piccadilly Circus Garage, Ltd., in conjunction with Messrs. Woolfe and Lucas, car park specialists, Denman Street, Piccadilly Circus, W.1, are managing the official car parks at the Schneider Trophy Race on Saturday, September 7, 1929, weather permitting.

Motorists will be able to watch the race from their cars, and places at each park can be booked in advance by applying to The Piccadilly Circus Garage, Ltd., Denman Street, Piccadilly Circus, W.1, or to Messrs. Leader & Co., of 14, The Royal Arcade, Old Bond Street, and all other theatre ticket agents in London and the suburbs. Near the car parks loud speakers will be erected by the Royal Aero Club, from which the progress of the race will be announced. The charges per car vary from 5s. to £2, according to position. Refreshments will be obtainable.

### Lockheed Hydraulic Brake Co., Ltd.

A short time ago it was announced that the Automotive Products Company had acquired the whole of the interests in the Zephyr Carburettor Co., of Leamington with the purpose of concentrating on the manufacture of the British-made Lockheed hydraulic braking system. We are now informed that the name of the Zephyr Carburettor Company has been changed, and in future will be known as the Lockheed Hydraulic Brake Co., Ltd.—the partners of the Automotive Products Company retaining the whole of the interests in the new company.

### A High Test Petrol

WHEN the resourceful Chancellor of the Exchequer of a past Government introduced the Motor Horse Power Tax, no one could foresee what drastic changes in motor engine design this would ultimately involve. Small engines had to be designed to do the work of big engines. This, in its turn, led to the imperative demand for a more efficient fuel, which put the thinking caps on the research chemists of both hemispheres. This explains the appearance on the market of a new petrol, Pratts High Test Petrol. It is the result of countless experiments and tests in the laboratory and on the road, with a view to producing a fuel which would coax the utmost horse power out of the small engines so popular to-day, and which would ensure the high standard of performance of the modern fast-revving engines. This new spirit is now on sale from Pratts High Test Petrol pumps throughout the country. At the same time comes a sister product, Pratts Motor Oil, which marks as important an advance in motor lubrication as does the High Test Petrol in its field. If you are lucky enough to own a car, just see what it will do on Pratts High Test Petrol and Pratts Motor Oil.

### Gloster Oil and Water Colours

A FEATURE of the Gloster Aircraft Company's stand at Olympia was a fine collection of original oil and water colours of their machines. These were no doubt familiar to many through reproductions which have appeared in Gloster publications. A member of the Gloster Company informs us that a number of visitors desired to know who the artist was who could so successfully transfer to canvas the romance of flying. For their information the artist was Mr. Geoffrey Watson, Pomona Studios, New King's Road, London, S.W.6, who, apart from his normal studies as an artist, has for some years devoted much time and work to aircraft. His cloud settings are the result of many hours in the air.

### Edison Storage Batteries, Ltd.

WE are informed that Edison Storage Batteries, Ltd., of Victoria House, Southampton Row, London, W.C.1 (telephone Holborn 6673), is a new company formed by the manufacturers, the Edison Storage Battery Co., of Orange, New Jersey, U.S.A., to carry on the sale and distribution of Edison storage batteries in the place of Messrs. Edison Accumulators, Ltd., with whom they have no connection whatever. In order that there may be no confusion, Edison Storage Batteries, Ltd., are taking the necessary steps to change their name to "New Distributors of Edison Storage Batteries, Ltd."

### Regent Motors, Ltd.

MR. M. CAMERON TATLEY, Managing Director of Regent Motors, Ltd., left for the United States on Wednesday, August 7, for a short visit to the Franklin Automobile Co., where plans for the further development of the Franklin business in Great Britain will be discussed. Regent Motors are the concessionaires in this country for the Franklin Air-Cooled Six.

### A Scintilla Achievement

WE learn that the Curtiss engine of the *St. Louis Robin*, piloted by Messrs. Jackson and O'Brien, which has just

established a new world's endurance record by remaining in the air for 17 days, 12 hrs., 21 mins., was equipped with Scintilla magnetos.

### A Dædulus Mascot

THE Vacuum Oil Co. Ltd., have produced a mascot plate for aeroplanes, incorporating the legendary figures of Dædulus and Icarus, his son, who made the earliest flights ever recorded. A pair of huge wings and the sun's rays form a background. The plate, which is reproduced in blue and gold, bears the words "Fly with Dædulus in Safety—Mobiloil for Reliability."

## PERSONALS

### Married

Sqd.-Ldr. R. M. DRUMMOND, D.S.O., O.B.E., M.C., R.A.F., was married on July 17, at St. John's Church, Toorak, Melbourne, Australia, to ISABEL RACHAEL MARY DRAKE-BROCKMAN, only daughter of the late Paris Frederick Drake-Brockman, of the Inner Temple, and of Mrs. Drake-Brockman, of Cintra Park, Upper Norwood.

The marriage of Flight-Lieut. V. H. TAIT, R.A.F., and Miss PHYLLIS BROOKE, only daughter of Brig.-Gen. H. F. Brooke, C.B., C.M.G., C.B.E., of 4, Onslow Square, took place quietly in London on July 26.

### Deaths

WALTER PATRICK DILLON BENNETT, Pilot Officer, Reserve of Air Force Officers, who was killed on July 19 in a flying accident at Borham Wood, was the younger son of the late Henry A. Dillon Bennett, of Stocksfield, and Mrs. Bennett. His age was 21.

LESLIE NAPIER BIRKS, who was killed while flying on July 14, aged 24 was the elder son of Napier and Lucy Birks, of Adelaide, South Australia, and grandson of the late Sir John McDougall, of London.

## PUBLICATIONS RECEIVED

*Amendment List No. 1 to Air Publication 958.* The King's Regulations and Air Council Instructions for the Royal Air Force, 1928. H.M. Stationery Office, Kingsway, London, W.C.2. Price 2d. net.

*Dress Regulations for Officers of the Royal Air Force.* Air Publication 1358. May, 1929. H.M. Stationery Office, Kingsway, London, W.C.2. Price 4s. 6d. net.

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